DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

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RAYNOLDS & NOURSE, PROPRIETORS. OFFICE....QUINCY HALL. SIMON BROWN, EDITOR. FRED'K HOLBROOK, HENRY F. FRENCH } ASSOCIATE EDITORS.

CALENDAR FOR JUNE.

"A thousand beauties lost to vulgar eyes,
Now to the scrutinizing search are spread."

THE "leafy month of JUNE," as the poet COLERIDGE calls it, never looked lovelier—never *was* more lovely—than it is this year. April was a month of contradiction; instead of shedding gentle tears, it blew fierce storms, and froze the vapor upon the trees which had been driven from the "vexed Bermoothes," or the angry Atlantic waves. Buds and flowers refused to come, and the birds fled to the shelter of forests, or were buried with snows and perished in the fields. But Nature will have her ways, and she has fast made up in the richness and luxuriance of the latter May, her sad deficiencies in April. Sunshine and showers have been frequent in May, and rapid and rich has been the growth of vegetation, under their genial influences.

"The quicken is tufted with blossom of snow,
And is throwing its perfume around it;
The wryneck replies to the cuckoo's halloo,
For joy that again she has found it;
The robin's red breast
Peeps over her nest,
In the midst of the crab-blossoms blushing;
And the call of the pheasant
Is frequent and pleasant,
When all other calls are hushing."

If all were as observing of the beauties of nature as was HOWITT, the writer of these charming descriptive lines, a thousand instructive books would soon take the place of those of the imagination, and a poor sickly imagination at that.

JUNE, this year, is luxuriant almost beyond precedent; the abundant May rains have been warmed by the sun, and have given the grass a growth and a color which promise well for the hay harvest.

The apple trees, now, this 18th day of May, are in full blossom, and out of *fifty-two* years, from 1798 to 1849, we find but some half-dozen years when they bloomed earlier. Indeed, vegetation has come forward with a Canadian pace during the last six or seven days.

Frost remained in the ground unusually late, so that the redundant water could not pass freely off, and the frequent and heavy rains in May have prevented the plowing and preparation of many acres of rather low and springy lands. Grass and grain look well; for them the cool weather has been favorable, so that, altogether, there is no cause for despondency; all will be right to those who unite cheerful hearts with a proper degree of skill. By the 5th of June, a wider breadth of land will be devoted to corn than was, probably, ever given to the corn crop in New England before. People have also made liberal preparation for the root crops, so that we trust a larger portion of corn than ever may be spared for the hungry across the seas.

JUNE is the most active month for vegetation; whatever gets a good start in this month will be pretty likely to come to perfection; "the farmer must therefore be stirring with the lark, and watch the whole circle of his fields." Great loss and vexation are occasioned by seemingly slight neglects now. If weeds, for instance, once get above the plants you are cultivating, the injury these occasion by retarding their growth is not the only one, for in extracting them they disturb and often break their roots, and thus destroy them.

MILLET.—We still advise the growing this crop, both for seemmer and winter fodder. Sow by the middle of the month, eight to twelve quarts of seed per acre.

THE GARDEN will require daily care.

HOEING must not be neglected, in the hot, sunny days.

CATERPILLARS.—These insects have appeared in

great numbers—make jelly of them as fast as possible.

YOUNG TREES must not be allowed to retain much fruit the first year or two of bearing.

STRIPED BUGS.—Scatter a little yellow snuff over the plants when the dew is on them—not too much, or it will destroy the plants.

THE CURCULIO.—Sift lime dust or ashes over the fruit when it is wet.

MULCH about young trees, shrubs, currants, gooseberries, or anything else you wish to keep moist—this and deep plowing are the antidotes for drought. These are a part of the geoponics of the month, and if neglected now, you will scarcely catch up with them this year.

HYBRIDIZING.

The doctrine of the cross fertilization of vegetables, or the "mixing," as it is termed, of certain varieties, is now too well understood to admit of a question in any mind. We hear farmers frequently contending that potatoes of different kinds will "mix" the first season they are grown in the immediate vicinity of each other. Thus the white and colored varieties, although previously grown at a distance from each other, if planted in alternate rows, or hills, will produce a speckled progeny. But this is not the case. Crossing, in the vegetable as in the animal kingdom, can only be brought about in the natural way—i. e., by cross impregnation or fertilization. All plants and vegetables of the same genus, whose period of blossoming is identic, are susceptible of hybridization in intermixture, by means, and through the agency of blossoms, and in no other way. The pistils of the blossoms of one variety receive the fertilizing dust, or fecundating pollen, from the stamens of the other, and the seed necessarily contains the germ of the variety with which it has become impregnated by the intermixture.

In this way, a good kind of melon, squash, pumpkin or cucumber, often has its valuable distinctive characteristics merged in those of some less desirable kind, and *vice versa*. Indian corn presents many varieties, and intermixtures are consequently frequent, here as in the culmiferous class. The farmer should understand these things, in order to proceed profitably with his labors.

ACKNOWLEDGMENTS.—Our acknowledgments are due the Commissioner of Patents, and to the Hon. TAPPAN WENTWORTH, at Washington, for sundry parcels of seeds; to HENRY CLARK, Esq., of Poultney, Vt., for a copy of the Constitution, By-Laws, list of officers and premiums of the Rutland County, Vt., Agricultural Society, for 1854, and CHARLES W. STEWART, Esq., of Washington, for a copy of the Census Returns of 1850.

EMIGRANT AID COMPANY.

An act of incorporation for a company bearing this title, was granted at the recent session of our State Legislature. At a meeting of the persons named in the act, held on Friday, as we learn from the *Traveller*, a list of by-laws was reported, the more important of which provide for an annual meeting in Boston on the first Wednesday in June, for the choice of officers, and that the Board of Directors shall consist of not less than five nor more than fifteen members. A report was submitted detailing the proposed plan of operation, which is to aid emigrants to homes in the West, and by so doing secure the Western territories to freedom. The capital is not to exceed $5,000,000, and in no single case assessments greater than 10 per cent. are to be called for. The corporators believe that if the Company be organized at once, as soon as the subscription to the stock amounts to $1,000,000, the annual income to be derived from that amount, and the subsequent subscriptions may be so appropriated as to render the most essential service to the emigrant; to plant a free State in Kansas; to the lasting advantage of the Company, and to return a handsome profit to the stockholders on their investment. The report closed with recommending a meeting of the stockholders on the first Wednesday of June, for permanent organization, and arrangements were made to have subscription books for the stock immediately opened.

For the New England Farmer.

POTATOES—WHEAT.

GENT.:—Allow me to say to my farming friends, a little spring wheat is worth trying for *this year*, and when September comes, two or three acres of winter wheat may do them infinite benefit another year. Three acres to each farm will bread the farmers of New England.

In the various kinds of long potatoes, cut off the end of *small eyes;* plant for the table and the market, the *body* of the potato. Small eyes and small potatoes must give a small yield, and small potatoes, to be consistent with nature. Please try the experiment. Do you plant the *tips* of your corn? Yours truly, H. P.

New York, May 7th, 1854.

TO PRESERVE FENCE POSTS.—In so important a branch of farming, we endeavor to give everything that may have a beneficial tendency. A writer, E. H., in the *Rural New-Yorker*, speaks confidently of the following plan of preserving posts:—"I prepare my posts for setting and then let them season. I then take coal tar, and paint them with three coats of the same. I paint the post from about four inches above where they set in the ground to the bottom, and the end that sets in the ground also,—putting the paint on hot. A gentleman informed me that he had known a fence set in this way, that had stood forty years, and was as permanent then as at first. I think this way is easier and cheaper than lime, and more durable."

For the New England Farmer.

THE BIRDS OF NEW ENGLAND,

THEIR PAST AND PRESENT HISTORY....NO. 10.

BY S. P. FOWLER.

The Indigo Bird has not, like many others of our feathered tribes, attracted general notice, at least in the eastern part of Massachusetts. It is a bird more particularly found in gardens and orchards, during the breeding season, where, from the top of an old pear tree, the mate will enliven and animate by its song, the landscape glowing with beauty and fragrance under the rays of a noon-day's sun in June. Mr. Nuttall says, in the village of Cambridge, I have seen one of these azure, almost celestial musicians, regularly chant to the inmates of a tall dwelling-house from the summit of the chimney, or the point of a forked lightning rod. This beautiful bird is, with us, only a summer resident. It passes the winter in tropical America, and is first seen in Massachusetts about the 20th of May. The female seldom attracks much notice in her humble dress, and is not often seen. She constructs her nest of grass and leaves, and places it in a low bush. There are singular discrepancies amongst ornithologists, in regard to the color and markings of the eggs of the Indigo Bird. Mr. Wilson remarks, the eggs, generally five, are blue, with a blotch of purple at the end.

Mr. Audubon, in his octavio edition of 1841, says the female lays from four to six eggs, which are blue, with a spot of purple at the large end. In a note sent to Mr. Audubon by Doctor Brewer, when speaking of the Indigo Bird, the doctor says the eggs, four in number, are eleven-sixteenths of an inch in length, seven-sixteenths in breadth, and of a uniform white color, without the slightest blotch or mark. He continues, I have never met with an egg having this purple blotch at the larger end, which you [Audubon] and Wilson mention as existing there, although my observations are taken from the contents of more than eight nests. By way of reply to Dr. Brewer, Mr. Audubon says, I have before me at this moment, an egg of the Indigo Bird, procured by myself, which has several dots toward the larger end, and of which the general color is not pure white, but as described by Nuttall, greenish white, or rather, as I would call it, lightish blue. Mr. Nuttall says, the eggs of the Indigo Bird are about five, and are greenish white, and are without spots. Doct. DeKay, in his history of the birds of New York, as given to us in the State Survey, says, when describing the Indigo bird, their nests are placed on some low bush with white immaculate eggs.

Mr. Peabody, in his report on the ornithology of Massachusetts, notices the discrepancies in regard to color and markings of the eggs of the Indigo Bird, and thinks the subject is greatly in want of attention.

Mr. Giraud, in his Birds of Long Island, says, the eggs of the Indigo Bird are usually five in number, and of a bluish color.

Who can decide when distinguished ornithologists disagree? We have not the vanity to suppose that anything we may offer, will settle this question, but our own observations upon this subject,—with the eggs of the Indigo Bird on a table before us, are these. They are of a greenish, or as most persons would say a blueish white, without any spot or blotch whatever.

The food of the Indigo Bird consists principally of insects, worms, caterpillars and grasshoppers. They likewise feed upon various kinds of seeds, and it is said they can be reared in a cage on the usual diet of the Canary. The male bird may be known by its rich blue livery, tinged with verdigris green; and the quills and tail feathers dusky, edged with greenish blue. The female is yellowish-brown, above, paler beneath. The beautiful and cheerful songster known to our ornithologists as the Purple Finch or American Linnet, is now frequently seen with the Indigo Bird, in our orchards and gardens. This is one of the birds to which we might refer, as having within a few years, sought the habitations of men. We can distinctly remember the time, when this bird was not to be found in the vicinity in which we reside, except in open pine woods or dense cedar pastures. The Purple Finch is a very hardy bird, having been found by Doct. Richardson on the banks of the Saskatchewan river. This bird leaves the eastern part of Massachusetts for the South, from the first to the middle of October. We noticed this autumn, many lingering after this period and feeding upon the berries of the honey-suckle. In spring they arrive with us early in May, and are seen feeding upon the expanding flower-buds of the elm, and are conspicuous from their beautiful appearance, and fine notes, resembling those of the Canary. The pine forests at the North appear to be the home of this Finch, and this partiality for evergreen trees continues, when it visits our gardens and seeks our protection. It may be that the increased cultivation of evergreens within a few years, in our gardens, have served to attract them from their former haunts. It is somewhat singular, from all we can learn, that Wilson, Audubon or Nuttall, do not appear to have ever seen the Purple Finch's eggs or nest. Mr. Nuttall says, "although several pair of these birds usually pass the summer in this vicinity, [Cambridge] in spite of the utmost diligence, continued for three years, I have never yet been able to discover their nests, although I have seen the female collecting wool from a fence for the purpose. General Dearborn, however, informed me that he had seen the nest of this species [in July, 1830] containing young, fixed on the low, horizontal branch of a balsam fir, contiguous to a house, and even near a path. The outside appeared to be lined with lichens, and the whole was neatly and compactly formed. They seem indeed much attached to evergreens, frequenting their shade, during the heat of the day. They sing at various times, but most vigorously in the morning and evening."

Bonaparte remarks that much confusion exists in the works of naturalists, respecting those finches and bulfinches that are tinged with red. And Swainson is almost persuaded that there are two distinct species of these Purple Finches, which not only Wilson, but all modern ornithologists of America have confounded under the same name.

The male American Linnet or Purple Finch may be known by the deep crimson on the head and chin, with the breast and rump paler, inclining to rosaceous.

Several pairs of these birds have built their nests in our neighborhood, the past season. One was

taken from the branch of a pear tree, about fifteen feet from the ground. The bottom and outside of the nest was composed of small twigs, taken from the larch and honeysuckle, of three or four inches in length. These small portions of the end of the branches were gathered by the female bird, by breaking them off with her bill, of a suitable length to form the bottom and sides of her nest. Upon this loose and open frame work, was laid a close and compact nest, made from small fibrous roots and strips of bark taken from a grape vine—The inside was well lined with pieces of thread, wool and hair, and contained four bright emerald green eggs, marked at the larger end, with small, black, unequal dots and blotches of dark purple. The internal width of the nest was two inches and a half, depth one inch and a half.

Mr. Audubon, in the 3d vol. of his "Birds of America," New York octavo edition of 1841, page 172, makes mention of receiving a communication from a friend well known as a distinguished Ornithologist, upon the habits of the Purple Finch.

In this communication to Mr. Audubon he says, "I have had the good fortune to meet with its nest this season. Mr. Cabot found another, and is probably the first naturalist who has done so. The nest which I found, was built in a cedar tree, at the distance of five feet from the ground. The tree stood by itself in a small pasture, which was sparingly covered with half-grown cedars. The nest itself was rudely constructed; it was composed externally of coarse grass and weeds, lined with fine roots of the same, and little care seemed to have been bestowed on its completion. The diameter of the exterior was *nine inches*, the brim *three inches*, the depth *one inch*, the external depth two inches, giving it thus a shallow or flattish appearance. The eggs, four in number, were of a bright emerald green." It is evident that Mr. Audubon's Boston friend has made a mistake, in the measurement of the nest of the Purple Finch, and in the description of its eggs, or what is more probable, the errors have occurred by the carelessness of the printer. From a conversation we once had with Mr. Audubon, we are inclined to believe that many errors exist in the writings of our Ornithologists on the subjects of nests and eggs of our birds.

The claims of American Linnet or Purple Finch, to the protection of the horticulturist, we will now consider—and we are sorry here to be compelled to observe, that this beautiful and interesting stranger, upon a more intimate acquaintance, indulges in occasional habits that are calculated to provoke the cultivator of fruit, and to render him obnoxious. We here allude to the mischief occasioned by these birds in spring, by eating the expanding buds of fruit trees. But this habit of the Finches is, so far as we can learn, as we have before noticed, only occasional. The buds of the elm, being more sweet and mucilaginous, are preferred, and constitute their principal food in spring. How extensive the injury sometimes produced by these birds may have been, we do not know, but we presume it is not great. We have never heard any complaint of this sort, from cultivators in this vicinity. Their food, in summer, consists principally of insects, and in Autumn, when these fail, they subsist on juicy berries, as those of the honeysuckle. May we not claim for this fine bird the protection of horticulturists? Those persons, who derive pleasure in the cultivation of extensive gardens, and love and seek the companionship of birds, may do much to allure them from their woody haunts, to the cultivated grounds and abodes of men. This we may effect by the introduction and cultivation of the different varieties of forest and ornamental trees and shrubs, in our grounds, particularly evergreens. There is a constant and natural tendency in some of our birds, to become attached to peculiar kinds of trees and shrubs, usually found in the woods, in consequence of their affording them food and shelter, or in being those usually selected, in which to build their nests, and rear their young. When those favorite trees of particular birds are removed to our cultivated grounds, they are not unfrequently followed by the feathered tribes. In this connection we would notice, at long intervals, the visits to our gardens, of that most interesting bird, the Wood Thrush. But we can hardly suppose that this eminent songster of the wood, with all his shyness and love of the deep forest shade, will ever become an inmate of our gardens. And for the purpose of directing the attention of farmers to this bird, who never interferes with their crops, we will quote the description given by Mr. Audubon of its note.

"The song of the Wood Thrush, although composed of but few notes, is so powerful, distinct, clear and mellow, that it is impossible for any person to hear it, without being struck by the effect which it produces on the mind. How often, as the first glimpses of morning gleamed doubtfully amongst the dusky masses of the forest trees, has there come upon my ear, thrilling along the sensitive cords which connect that organ with the heart, the delightful music of this harbinger of day! The musical powers of this hermit of the woods must be heard to be fully appreciated and enjoyed."

There is a more common species of Thrush found in our woods, which is sometimes mistaken for the Wood Thrush. This bird is Wilson's Thrush or Veery. Its song, although resembling that of the Wood Thrush, is less powerful, but is nevertheless extremely pleasing. Wilson's Thrush, like its near neighbor, the Cat Bird, is frequently in the habit of leaving its haunts in the woods, to take up its summer residence in our gardens, providing it can be accommodated with shelter and shade, wherein to conceal itself. The plaintive note of this Thrush is sometimes heard in a summer evening, after the close of day, and from this pleasing habit of serenading, it has been called the Nightingale. The food of this species, consist of various kinds of insects and worms.

We have been sorry to notice this spring (April 25, since the above article was written) the Purple Finch feeding upon the flower buds of the pear tree, after the buds of the Elm had expanded into flowers. S. P. F.

Danversport, Dec. 27, 1850.

REMARKS.—This letter closes the pleasant and instructive series upon the "past and present history of the Birds of New England." They have gratified a large class of our readers, those who love the ways of nature, and have been extensively circulated in other journals. Mr. FOWLER does not love nature by halves; the plants and flowers have their attractions for him, too,—and although

immersed in business, he is still the ardent lover and student of the beautiful and wonderful forms and changes about him. He knows that

"There's beauty all around our paths, if but our watchful eyes
Can trace it midst familiar things, and through their lowly guise."

We hope his pen will not be idle,—but that through it he will continue to speak to us, until our appreciation of the beautiful is as comprehensive as his own.

POULTRY AND EGGS.

Few persons, we apprehend, have any correct idea of the magnitude of trade, both at home and abroad, in poultry and eggs. Having recently had our attention directed to a work embodying some interesting statistics on the subject, we propose placing them before the reader. The amount of sales of poultry at the Quincy market, Boston, in the year 1848, was six hundred and seventy-four thousand four hundred and twenty-three dollars, while for the city of Boston, they exceeded four millions. The number of eggs sold in Quincy market was 1,129,735, the price paid for them being about $203,352, or an average of 18 cts. per dozen. The sales in the whole city, it is supposed, fell little short of $1,000,000. The daily average consumption of eggs at three of the hotels, in that year, was 200.

The city of New York, however, it is estimated, expends a million and a half of dollars yearly, in the purchase of eggs. Probably the amount in 1853 was much larger, as the above estimate was made in 1848. One single dealer in Philadelphia sends to this city daily, one hundred barrels of this commodity.

Ireland and France are great egg-exporting countries. We have not the most recent statistics, but they are of sufficiently late date to approximate to the present condition of the trade. M'Culloch says that the amount paid yearly by England to Ireland for eggs and poultry is from £200,000 to £300,000. The yearly value of eggs alone exported from Ireland to Great Britain exceeds £100,000. The number is probably 70,000,000 and 80,000,000. The British census for 1841 gave an *ad valorem* estimate of the poultry stock in Ireland, in which each fowl was valued at only sixpence sterling. According to this estimate, it showed that in the province of Leinster the stock of poultry amounted to £56,243; in Connaught, to £35,216; in Munster, to £62,830, and in Ulster, to £47,883; making a total of £202, 172. But even at the low average named, the amount probably much exceeds this, as the people supposed the inquiry was made to obtain the basis of some new tax, and reported the number as being less than it really was.

The number of boxes of eggs shipped by the city of Dublin steam packet company's vessels to London during the year 1844-5 was 8,874. A box of the usual dimensions contains 13,000 eggs. but occasionally larger ones are used, capable of containing four times that number; so that about 23,565,500 are annually shipped from Dublin to London. To Liverpool, in the same year, in the same company's vessels, were shipped 5,135 boxes containing 25,565 eggs: giving a total export from Dublin to two ports of England of 48,539,900, valued at £122,500. Since then, however, the trade has enormously increased.

In 1840 Great Britain imported from France and Belgium 96,000,000 of eggs, the duty upon which (one penny per dozen) amounted to £34,000. Nine-tenths of the foreign eggs imported into Great Britain are from France. The importation thence in 1842 was 89,548,741; in 1843, 70,415,831; and in 1844, 67,487,920. The yearly importation exceeds 80,000,000. The consumption of eggs in Paris is estimated at upwards of *one hundred millions* yearly. Supposing a fowl to produce one hundred and twenty eggs annually—which is perhaps a fair average—the reader may imagine the immense stock of poultry that must be kept in France. Any one who has travelled in that country is aware that they are reared in vast numbers, they being the most profitable stock on the many small farms owned or tenanted by the French peasantry.

The late poultry shows have tended to awaken new interest in the breeding and rearing of poultry by our own farmers, especially those whose land is situated near large cities, or where there are means of rapid transport to such cities. Though we are far from believing all the stories which interested parties, or amateur poultry keepers put forth, there can be no question that, with economical management, the poultry-yard becomes a source of large profit, as it is of unabated interest. On this subject, however, others are far more competent to speak than we are. But we are glad when a new impulse is given to the rearing of any domestic stock, and though the present movement in that direction looks a little too much to extravagance in size, or peculiarity of breed, its more mature result will be beneficial to the farmer, and through him to the consumer.—*New York Commercial Advertiser.*

For the New England Farmer.

HEN MANURE.

Mr. Editor:—Having a quantity of hen manure on hand, and wishing to know how to use it to the best advantage, I take the liberty to inquire of you, or some your correspondents. How should it be prepared, and how, and when applied? On what crops is it most beneficial? What is its value as compared with stable manure? Will it kill corn if applied in the hill at planting?

E. Raymond, Me. S. Tenny.

Remarks.—A neighbor of ours, who keeps some one or two hundred fowls, finds an important item of profit in the home-made guano which he is enabled to manufacture from the droppings of the roosts. These are carefully covered with sand, loam, or old muck, thoroughly mingled in the spring, and a single handful applied to the hill. In this way a large cart full of about 40 bushels, will manure an acre. He finds it about as active as the Peruvian guano.

"Blind Teeth" in horses, if let alone, cause the animal to go blind. Hence the name. They should be broken out as soon as discovered. One hand should hold the animal's jaws apart, while another with a nail-punch, or something of the kind, and a hammer, accomplishes the work.—*Ibid.*

For the New England Farmer.

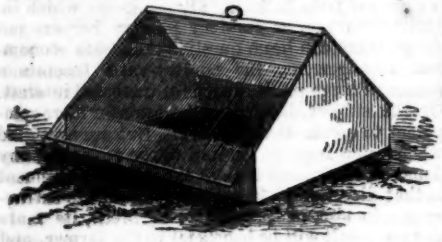
BEST APPLES.

MR. EDITOR:—The best varieties of fall and winter apples which I have cultivated for the market, are the Baldwin, Hubardston Roxbury Russet, R. I. Greening, Seaver Sweet, Pound Sweet, and Green Sweet. Other varieties I have which I think should be ranked among the best of fall and winter apples, Hunt or English Russet, (the qualities of which the editor of the *Farmer*, can better describe,) Red Russet, Lyscomb, Red Favorite and Thompson apple. Russets require strong and moist soil. For early apples, Williams Sweet Bough, (for which I received $60 for 26 bushels) the past season, and Porter. I have 15 or 20 of other varieties, some of them seedlings which I am cultivating in order to test their qualities and productiveness, before recommending them for propagation.

N. P. MORRISON.

Somerville, 1854.

A PLANT PROTECTOR.



The cut above represents a cover made of tin and glass, which is portable and convenient for the protection of young plants, such as squashes, melons, cucumbers, tomatoes, &c., and will prove as effectual against frost as against bugs. The glass may be easily raised in the grooves so as to admit the air, which, when closed, admits the heat, and light, but excludes the bugs.

The description below and one of the protectors, from which the cut was drawn, were furnished by friend FOWLER, of Danversport. He says—

Feeling the want, several years since, of something to protect and bring forward early and tender plants in our variable climate, I was led to construct a Hand Glass, that would combine cheapness with utility. One of these contrivances for the protection of plants or flowers in a garden, I now send you for examination. The English Hand Glasses are made, by placing in an iron or zinc frame, small pieces of glass, fastened together by narrow strips of lead. To make or repair these covers, much of the glass is required to be cut to conform to the frame. The difficulty in repairing the broken glass, together with their expense, has probably prevented the more frequent use of the Hand Glass in garden operations in New England. The one I send you to-day, as you will perceive, will require no cutting of the glass, the frame being made to correspond to the size of the pane. This being window glass, when accidentally broken, can easily be replaced. Any tin plate worker can make these glass covers from sheets of tin, of the size you desire, and they can be furnished at a comparatively small expense. They should be made in such a manner that the glass will slip easily up or down, when it becomes necessary to give the plants air. To protect the frames from weather they should be well painted.

S. P. FOWLER.

Danversport, March 13, 1854.

For the New England Farmer.

LIFE OF RICHARD BAGG, Jr.

BY. J. N. BAGGE.

MR. EDITOR:—I know not how to render Agriculture a more essential service, than by sketching the life of one of the most noted farmers of Hampden County. Although his namesake and fellow-townsman, there was no consanguinity between us, consequently no one can accuse me of partiality.

Besides, I lay claim to advantages, in treating of his character, possessed by few others. Joined to a general neighborhood acquaintance, may be added, that of pupil and member of his family. Once, he was my teacher, and thrice my employer. I thus had facilities for seeing much of him in private life, and knowing some of his virtues. The subject of this article was born in 1812, and died in 1852, in West Springfield, his native town. His parents, who are still living, are farmers of the old school, and are in good circumstances.

The boyhood of our subject was remarkable for an activity and intelligence beyond his years. His promptitude and youthful manliness, made him the pride of his parents and the villagers. His was no mediocrity of attainment. He was first and foremost, both in the school-room and play-ground. He was a leader rather than a follower. He was bold, without being impudent,—punctilious without being mean, and shrewd without being cunning and treacherous.

His love of books and study were very great. Everything within his reach was read with astonishing avidity. In those days, one or more terms at some incorporated academy were considered necessary, to give character and finish to a young man's education. Young Richard was accordingly sent to Monson. Here he made great proficiency and rapidly fitted himself for college. But now a new difficulty obstructs his path. Ill health, brought on by close application to study, prostrates his corporal system, and he comes home, in the opinion of his friends, to die with consumption. But he would not be idle. Activity, which had always characterized him, was his ruling passion now. He went to work in his father's *garden*. He extirpated every weed, and made great exertions to augment the growing corps. He procured glass frames and made hot-beds, (the first that the writer ever saw,) till his father's garden glittered like a crystal palace.

His mysterious movements attract public attention, and the neighbors stop and examine his works, and ask him questions. But he was a man who kept his own counsel. His replies were always terse, sensible and cautious. No unguarded answer escapes his lips. He communicates nothing important to be reserved, and reserves nothing important to be known. His health begins to improve under a rigid system of diet and exercise, and he assists his father in the lighter duties of the farm. He is entrusted with the sale

of the farm produce. He used to say that the first time he went to market, he drove his father's oxen and a load of pumpkins, the proceeds of which amounted to ten dollars. His success encouraged him. The demand for farm produce increases, and home industry is inadequate for the supply. He begins to speculate and buy of others. Winter comes on, but he cannot be idle, and he takes the school of a neighboring village.

Here he matures his plans for the enlargement of business in the coming spring. He hires land and sows unsparingly and skilfully. He is the only man of his trade in the community, and he controls the market. The families of the wealthy are pleased with the urbanity of the young farmer, and ask him to call often. Success attends him. As fast as his means will allow, he increases operations. He hires men and buys tools and teams, and adds field to field.

In 15 years from the commencement of his Agricultural operations, he became the largest gardener in the County, if not in the State. He had about 40 acres under garden cultivation, and some of it produced 2 and 3 crops per annum. Of Asparagus and Onions he had several acres each. He hired a great many men, and has been know to employ in the busiest season of the year 60 persons. It was instructive to pass through his grounds, which were always accessible, and witness the clean and careful culture and the skilful blending of different crops, so arranged that when one was removed, another would immediately fill the place. He undertook the culture of one piece of land, so barren and sandy, that its improvement seemed utterly hopeless. He carted on large quantities of muck, ashes and manure,—he brought leaves and mould from the woods,—he plowed in green crops and used guano, until, literally, he made "the desert to rejoice and the wilderness to bud and blossom like the rose." This ground, to-day, is like an oasis in the desert, a fruitful field in the midst of surrounding sterility. 500 Baldwin apple trees, planted by his own hands, grow thriftily on this plain, a living monument to his industry and skill.

Every thing he undertook was vigorously carried to its completion. His motto was, "what you are resolved to do, begin it this minute," and this was the secret of the immensity of his labors. Some men accomplish more in a short life, than others in a long one, and so this man, though dead at 40, lived longer and accomplished more, than most men at 80. His spirits never seemed to flag like those of other men. He looked a difficulty directly in the face, and walked up to it while looking.

He considered a matter well, before he enlisted in it, but once engaged, he worked with all his might. Like Napoleon, he was just as courageous the day after defeat as before. No sooner was a difficulty vanquished than he sought out and grappled with another. His presence, even, inspired confidence. He had the power of infusing ambition into those around him. Wherever he went there was life and energy. He was regular and precise in all his movements, and required regularity and precision in all whom he controlled. Every workman had a place for his hat and clothing, labelled with the name of the one occupying it. Every tool and implement had a place, and was thoroughly cleaned after using. Printed regulations for the government of his workmen, hung in his kitchen.

His defects consisted in an over promptness. He seemed so anxious to reach the mark, that he sometimes went beyond it. Take him all in all, however, he was a good man, beloved by his family, respected in the community and an honor to the church of which he was a member. His life and his burial will not soon be forgotten, by those among whom he lived. He has left a worthy example to all young men, showing clearly that energy and intelligent industry is all that is needed, to make farming profitable.

West Springfield, Mass., 1854.

THE CYCLE OF THE SEASONS.

The following article was published in the *Scotsman*, upon the cycle of the seasons, and will interest many of our readers, we have no doubt. The measure below called a *hectolitre*, is equal to *two bushels* and *five-sixths* of our measure—the franc is equal to 18 cents and 6 mills of our money.

"The 'uncertainty of the weather' has been a subject of complaint to the husbandman from time immemorial. Science has shown, however, that law and order prevail in many phenomena once deemed to be under the blind dominion of chance, and ingenious men have indulged the hope that a key might yet be found to the irregularity of the season—not that we shall be able to prognosticate whether any particular day or week will be foul or fair, but that we may have rational grounds for expecting a good season or a bad one, or a series of good or bad seasons. Intelligent farmers believe that a course of abundant crops is pretty sure to be followed by a course of deficient ones; but whether the cycle of good and bad crops is of a determinate or a variable length, and if determinate, how many years are required to complete it, are points upon which opinions differ widely, and certainty is perhaps despaired of.

"A paper read a few days ago by M. Bacquerel to the Academy of Science, on the culture of wheat in France, supplies statistical facts of some value bearing on this subject. They show that there is a periodicity in the recurrence of good and bad harvests; that five or six years of abundance, and five or six of scarcity, follow each other pretty regularly. From want of capital and enterprise, and good means of internal communication, the French are more dependent on their own harvests than we are in this country, and the difference between a good and a bad year telling more strongly on their markets, serves better to test the influence of the season. M. Becquerel quotes from Hugo the following table of the average price of wheat for all France:

	Francs per hect.	Shillings per qr.
1816 to 1821—period of scarcity	22.66	64s. 5d.
1822 to 1827—period of abundance	15.80	38s. 4d.
1828 to 1832—period of scarcity	22.00	60s. 7d.
1833 to 1837—period of abundance	16.16	37s. 2d.
1838 to 1842—mixed period	20.31	48s. 8d.
1843 to 1847—period of scarcity	25.68	59s. 0d.
1846 to 1852—period of abundance	16.68	38s. 4d.

We arrive at a similar result by comparing the imports and exports of wheat, and taking the excess of the one over the other:

			Hectolitres.
Scarcity...1816 to 1821.....	Excess of	Imports...	6,247,000
Plenty ...1822 to 1827.....	"	Exports...	1,258,000
Scarcity...1828 to 1832.....	"	Imports...	9,523,000
Plenty ...1833 to 1837.....	"	Exports...	944,000
Mixed ...1838 to 1842.....	"	Imports...	1,126,000
Scarcity...1843 to 1847.....	"	Imports...	18,697,000
Plenty ...1848 to 1852.....	"	Exports...	13,188,000

"The hectolitre contains 22 imperial gallons, or three hectolitres are a trifle more than a quarter. It will be observed that the importation of wheat in France, in years of scarcity, is very small when compared with ours. This, in the period from 1843 to 1847, while wheat averaged 59s.—a very high price in that country—the whole imports in the five years were only 20,161,000 hectolitres, from which, deducting 1,164,000 of exports, there remained for consumption only 18,697,000, or 6,400,000 qrs. In the period of scarcity, from 1816 to 1821, when the price was 54s. 5d., the imports were only 6,247,000 hectolitres in six years, or about 345,000 qrs. annually.

"The five years from 1847 to 1852 were years of abundance both in France and Britain. Supposing, then, that the change takes place quinquennially, we should now be at the commencement of a period of scarcity, and that the present year fulfils this character is manifest from the state of the markets on both sides of the Channel. The French average for the first two weeks of November, as given in the *Moniteur* a few days ago, was 29.97 per hect., or 68s. 11d. per qr.—a famine price in France; and the British average for the whole of November was 71s. 1d., marking rather severe dearth. It is, therefore, a question of some importance, whether we are to regard the present deficient crop as a pure 'casuality,' an evil which an opposite casuality the next year's abundance may redeem, or as the first of a series of bad crops. In our opinion, the hypothesis of a five years' cycle, embracing the latter conclusion, though not established beyond challenge, has a sufficient probability to render it worthy of entering into the calculations of farmers, corn merchants, contractors for public works, and even ministers of state.

"A hypothesis offered to explain anomalous or seemingly discordant physical facts is more readily accepted when we can trace in it the operation of some physical cause. In the *Scotsman* of the 7th of September, 1845, we gave an account of a memoir published by Schwabe, a German astronomer, on the spots of the sun, in which he maintained their periodicity—that they increased for a certain term, then diminished for an equal term, and that the interval between the maximum and minimum was about five years, so that the cycle was completed in about ten. This conclusion rested on the observations of eighteen years, which (as Colonel Sabine informed the British Association at Belfast) have been since extended to twenty-six years, and with the same result. Now, as the light and heat of the sun are obviously essential to the success of grain crops, it occurred to Gautier, a French or Swiss man of science, to compare Schwabe's cycle of the solar spots with the results of the harvests in France as shown by the price of corn; and he found that, taking the years in groups, to eliminate accidental influences, those in which the sun had few or no spots coincided with years of abundance, and those in which the spots were numerous with years of scarcity. We have here, then, a glimpse of a physical cause or account for these alternating periods of scarcity and plenty, which experience has forced upon the attention of our farmers. It is true that the spots of the sun cover but a very small portion of his surface at any time, but the decrement of heat in a bad year is also small compared with the whole quantity which the earth receives from the sun; and it is not improbable that, besides causing a direct loss of light and heat proportioned to their size, spots when abundant may indicate a general enfeeblement of the heating and illuminating power of the whole surface of the sun.

"The progress of science is constantly adding to our knowledge of the latent ties which connect the most distant parts of nature. Those minute deviations from the normal position of the magnetic needle, called its diurnal variation, were discovered a hundred years ago, and gave plain indications of solar influence. It was only known within these few years that these variations were themselves subject to variation—were greater in some years than in others—and that another class of phenomena, called 'magnetic storms,' sudden and seemingly unaccountable disturbances of the needle, disclosed themselves. It is now found that these are periodical also. To use the words of Colonel Sabine, 'there is a periodical variation or inequality affecting alike the magnitude of the diurnal variation, and the magnitude and frequency of the disturbances of storms, and the cycle or period of the inequality appears to extend about ten of our years, the maximum and minimum being separated by an interval of about five years.' Perhaps bye-and-bye the hope and prospects of the husbandmen may be read in the vibrations of the compass."

FACT VERSUS THEORY.—It is a common notion, that to have good crops the seed must be often changed, and many farmers relying on this theory, sow seed that is "far fetched and dear bought."

In a conversation, last evening, with Mr. Jonathan Nelson, of this city, well known here as a substantial farmer and a reliable man, he informed me that he helped reap a field of rye, the past summer, of a little less than one acre and a half, yielding thirty-eight and a half bushels of excellent quality; that he has helped reap fifty-five successive harvests of rye on the same farm, owned by his father, (the late Deacon Nelson) and himself, *that in all that time the seed had never been changed;* that the first of those fifty-five harvests was from seed raised on the same farm by the former owner, and that he knew not how long the process of independent husbandry had been carried on by his predecessor.

Facts and theories often disagree but nature is constant and true to herself.—*Worcester Spy.*

TO THE TRUSTEES OF THE MIDDLESEX AGRICULTURAL SOCIETY.—The Commissioner of Patents has forwarded to the Secretary of this Society, under the frank of the Hon. TAPPAN WENTWORTH, a package of *the improved King Philip or Brown* corn, for each Trustee, which may be had on application at this office, or at the residence of the Secretary in Concord. SIMON BROWN,

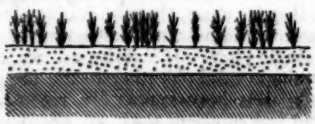
May 10, 1854. *Secretary.*

GRAIN DRILL.

We have often spoken of the importance of the *Grain Drill* as a labor-saving machine. The cut above will show how simple a thing it is, and how easy and readily the seeds may be put into an acre of land, all in straight lines, and at regular distances from each other. The seeds are depesited at a uniform regulated depth, from which arises a considerable saving of seed, one-third at least, while there is, usually, a considerable increase in the crop over the broadcast sowing.

As the machines are constructed in England, they are complicated, cumbersome and expensive, and it is probably for this reason that they have not come into general use.

Below are two cuts, the first showing the grain as it comes up, and appears when sown broadcast, by hand: and the second, how it appears when sown by the drill machine.



GRAIN SOWN BY HAND.

The advantages derived from using drill machines for sowing wheat and other small grains, have been summed up by Mr. Binns, at a meeting of an English agricultural society, as follows:—

1. The seed is delivered with regularity.
2. It is deposited at a proper depth.
3. The weeds during the growth of the plants, may be destroyed with great facility. [In this country the weeding of grain is not common. Indeed, when it is sown broadcast, weeding it could not be done without destroying the crop.]
4. By admission of the sun and air between the rows, a stronger and healthier plant is produced, and of course a heavier crop.

Mr. Binns gives five or six other reasons for drilling, but they are not quite applicable to our modes of husbandry. He also states that *fifty-six*

GRAIN SOWN BY MACHINE.

bushels of wheat, per acre, have been raised on the light soils of Norfolk, England, by drilling. One great advantage of this mode is, that *if the field is first harrowed down level*, the drill deposits the seed at an equal depth; it then comes up all at the same time, and the crop is even and presents a fine appearance through the whole season.

For the New England Farmer.

BARLEY AND INDIAN CORN.

Mr. Editor:—In the *New England Farmer's* report of the twelfth Agricultural Meeting at the State House, Mr. Russell, of Pittsfield, is represented as saying that "good heavy barley is worth three times as much as corn." Now as the speaker could not have intended to make that statement, will you favor your readers with what he did mean, as to the relative value of the two mentioned grains.

I have raised barley, more or less, for ten years past, and am of the impression that a bushel of good well cleaned barley will make as much pork as a bushel of corn. Indeed I think it particularly adapted to the purpose of fattening pork. When ground fine and the meal scalded and allowed to stand till fermentation commences, hogs love it better than any food I ever fed them, and I think they will thrive faster than on any other.

That barley is equally good for other animals I doubt not; but what I wish more to call the attention of your readers to, is, the fact that grass seed, sown with barley, always catches.

Much complaint is heard now-a-days of the

failure of grass seed to catch or grow when sown with grain. Now I have never known a failure, when good seed has been sown on good land, with barley. Two years ago this spring I sowed a field, one half with oats and the other half with barley, and stocked the whole with timothy and clover. At harvest, where the oats were grown, there was no grass, while beneath the barley there was a luxuriant growth of it. This experiment, with my former observation, satisfied me that *barley*, and not oats, was the grain to grow, when seeding land with grass.

I have raised repeatedly, fifty bushels, and once more, from an acre of land. E. J.

Lebanon, N. H., April 18, 1854.

REMARKS.—We cannot tell our correspondent what Mr. RUSSELL meant. That barley is a profitable crop to raise, and better than oats to lay down land upon, we have no doubt.

For the New England Farmer.

PLOWS AND PLOWING.

Complete pulverization of the soil is the basis of all successful culture. This is brought about mainly by the use of the *spade* and the *plow*. Where personal labor abounds, and the extent of culture is limited, the spade may be advantageously used. Under its use, the culture may be more thorough than any other. But where the power of the ox or the horse is enlisted in aid of that of man, the plow is the implement to which these powers are applied.

From earliest times, when the crooked stick was first applied to this purpose, to the present day, the plow in some of its forms has been the implement of first importance, in the labors on the farm. Notwithstanding its long-extended use, it has received more variations in form and greater improvements within the last fifty years, than any other implement. And although it now has an admirable fitness for its purpose, it is probably destined to still greater improvements.

Within a very few years, a form of plow has been introduced, embracing such decided advantages, as to entitle it to the application of *the plow* by way of distinction. I speak of the *double plow*, which cuts two furrow slices at the same time —laying a few inches of the turf over flat, and thus throwing the next substratum directly upon it. On land adapted to this operation, as are all cultivated grounds, that have been properly freed of obstructions, it is apparent that the use of this plow will leave the ground in a state for much easier and more perfect culture, than any other. Suppose *nine inches* to be the depth of plowing thought expedient—let the first furrow be cut to the depth of *three inches*—and the second to the depth of *six inches*, and you have the perfection of work. By the use of the harrow or the cultivator, this last furrow slice can readily be broken up, so as to work as easy as old ground—by which we mean ground that has been under cultivation, one or more years.

Perhaps it will be objected, that the vegetable materials or the richest part of the soil is buried too deep by this operation; and that the material thrown up with the subsoil will not be found favorable for the growth of plants. Such objections will be found more theoretical than practical, when it is known that very few plants are grown the fibres of which do not extend as deep, at least, as nine inches; and when it is considered also, that this depth is absolutely necessary to protect the plants against the scorching rays of our summer sun. Many a plant has withered and died for want of such foothold. There is no vegetable or plant, within our knowledge, that will not grow better through the entire season, under a culture as deep as this, than with a more shallow culture.

Another consideration connected with this mode of plowing is worthy of particular notice. It places the vegetable matter in a position for decomposition where its benefits will all be preserved and used by the growing plants, at a time when most needed. The first impulse should be given to the growing plants, by the dressing of compost applied at the time of planting. About three months after this, when the vegetable fibres in the buried turf begin to decay, the gases disengaged by the process will be absorbed and taken up by the growing plants, and are peculiarly well fitted to aid their growth. Whereas, if the turf had been broken to pieces, and much of it left near the surface, as is usually done in the ordinary process of plowing and harrowing, very much of the sustenance given to the growing plants would be lost by evaporation. We have seen this distinctly illustrated on a field of onions where the vegetable matter turned under the furrow slice (green oats, for instance) were left undisturbed, and right side by side, the land was cultivated with like crop and like manure, excepting the underlayer of oats;—and the crop over the oats amounted to 700 bushels to the acre, when the other was less than 500 bushels to the acre.

We have seen it stated that it requires more effort or power to operate a plow cutting two furrow slices, than one cutting a single furrow slice of the same width and thickness as the two. Such was our first impression, when we operated the double plow. But our impressions have been corrected by the actual measurement by the *dynamometer* of the power used in the operation. When we reflect upon the principles involved, we think it quite clear, that the double plow will go with more steadiness, and less power of draft, than the single plow. If this be so, we cannot imagine a single valid objection to the use of this implement. We have repeatedly recommended its use, and feel confident that we are doing the farmer a good service in still recommending it.

Cheerfully granting to the gentlemen who first brought into use among us this form of plow, all the credit that can be claimed for so doing, we as cheerfully grant to these other gentlemen, who have so far improved upon the form first used, as to obviate all the material difficulties in its first operation—to wit, the want of perfect turning and laying of the first furrow slice. This we think an essential element in the operation of the plow.

While scientific men attempt to press upon laboring men uniformity in their operations in breaking up the soil, it is curious to observe how they themselves differ in the first elements of these operations. Instance, in their mode of spelling the name of the implement: one using four letters as *plow*—the other six letters as

plough—both having the same sound and pronunciation. Why these different modes of spelling the same thing is thus continued, it is not easy to say. The *shorter* mode, unless some good reason can be given for adhering to the *longer*, is certainly preferable. It is certainly no sufficient reason to say it used to be so. Because such a reason once admitted would exclude all improvements. On referring to dictionaries, we find both modes of spelling inserted, with no preference given. On referring to agricultural journals we find both modes adopted—the "eminent guide" in this operation, in Massachusetts, uses *six letters*—the equally respectable guides in New York, Pennsylnia and Ohio, use only four. "Who shall decide when doctors disagree?" P.

FARMER'S GIRLS.

Up in the early morning, just at the peep of day,
Straining the milk in the dairy, turning the cows away,
Sweeping the floor in the kitchen making the beds up stairs,
Washing the breakfast dishes, dusting the parlor chairs.

Brushing the crumbs from the pantry, hunting the eggs at the barn,
Cleaning the turnips for dinner, spinning the stocking yarn,
Spreading the whitening linen down on the bushes below,
Ransacking every meadow where the red strawberries grow;

Starching the "fixens"for Sunday, churning the snowy cream,
Rinsing the pails and strainer down in the running stream,
Feeding the geese and turkies, making the pumkin pies,
Jogging the little one's cradle, driving away the flies;

Grace in every motion, music in every tone,
Beauty of form and feature thousands might covet to own,
Cheeks that rival spring roses, teeth the whitest of pearls,
One of these country maids is worth a score of your city girls.

—*New York Tribune* HELLEN M. LADD.

FARMERS' ARITHMETIC.

Perhaps in no one thing is the "arithmetic" of the farmers put to a severer test than in ascertaining the value (perhaps with cold fingers) of a given number of pounds of hay at a given price. To those I would recommended the following rule of Adams, as easy, practicable, and infallible:

RULE.—Multiply the number of pounds of hay, or coal, by one half the price per ton, pointing off three figures from the right hand. The remaining figures will be the price of the hay, or coal, (or any other article by the ton,) in cents and mills, which can easily be reduced to dollars.

EXAMPLE.—What will be the cost of 658 pounds of hay, at $7.50 per ton?

SOLUTION.—$7.50 divided by two, equals $3.75—by which multiply the number of pounds, thus:

658
$3.75

3290
4606
1974

$2.46|750

The principle in this operation is the same as in interest—dividing the price by two gives us the price of half a ton, or 1,000 lbs., and pointing off the three figures to the right is dividing by 1,000—the same as in interest. The result above we have found to be $2.46, which is correct. And now, brother farmer, get your pencil, and see if you can find the above rule in fault.

For the New England Farmer.

MILCH COWS.

MR. EDITOR:—I received from you, by hand of B. F. Cutter, Esq., a copy of the transactions of the Middlesex Agricultural Society, (for which I am much obliged to you,) and at the same time an invitation to write an article for your paper, on milch cows, for which I am not so much obliged, but will try and give a few ideas on the subject. I have never kept more than from twelve to fourteen cows, and so far as my experience goes, I have come to the conclusion that it is best to keep good ones, and no more than I can keep *well*. When they come to the barn in the fall, I am careful to give them a change of feed as much as possible. To those that do not give milk, I give the poorer hay, and occasionally corn husks, stalks, &c., until about six weeks before calving, when I give them better hay, and some grain. By this way of managing, the flesh that the cow puts on by her own industry in summer, is easily kept on through the winter, with a little extra care, which enables her to bring us a good, strong, healthy calf, worth at least five dollars, when four weeks old. To the cows that I milk through the winter, I give good hay, giving them for a change a foddering, of clover, husks and *rowen* (if we have it,) almost every day. The clover I always intend to use up before the first of March. I feed them on chop twice a day, mixing a few hours before feeding, giving them about four quarts of shorts and two quarts of cob-meal a day with about half a bushel of cut hay of poor quality, with a table spoonful of salt at each time of feeding. This I think produces more milk than the same quantity of grain given in any other way. Great care should be taken not to excite the cow when driving to water or the pasture. If the boys must drive them, do not let but one drive at a time. Kindness pours out the milk and lays on the fat. Kicking cows, are always plenty, where there are kicking milkers; *I know it by experience*. It is an old and true saying, that "good pastures make fat calves," and it is equally true, that much feed make much milk. As to the different breeds of cows, I have not had much experience. I have one that is called the cream-pot breed, which is one of the best I have ever owned for milk. There are quite a number of half blooded Ayrshire in the neighborhood, which have the name and appearance of being good milkers. I am rather partial to the old *native* breed for milkers, when I can get the right pattern; that is, I want a cow of good size, one that will make 5½ or 6 hundred of beef when fatted, wide between the eyes, small horns, long slender neck, head inclining downwards, rather a thin skin, broad across the kidneys, small tail, small flattish leg, the udder large, running well forward and back, equally quartered, and the teats well apart, thin thighs, and last, but not least, a large crooked milk vein running well forward with a large hole at the end. One thing more should be taken into consideration, and that is, the disposition, which can almost always be told by the countenance. Tameness and docility of temper greatly enhances the value. One that feeds at ease and does not break over fences, and is kind to her associates, will always yield more milk, than one of the opposite disposition. When I buy a cow of the

above description, I am pretty sure I have got a good one, and think the above marks are a very safe guide to purchase by. I have lately been reading Guenon's Treatise on Milch Cows, and find it a good work. His ideas on diseases and their treatment are worth knowing. His books only costs thirty-seven and a half cents.

Now, Mr. Editor, I have complied with your request, in a very feeble manner, and will only say, that I hope you will extend the same invitation to some other person more competent than myself, and thereby get more and better ideas.

JOHN M. TYLER.

Pelham, N. H., March 31, 1854.

STATE BOARD OF AGRICULTURE.

MET AT THE STATE HOUSE APRIL 10, 1854.

His Excellency, GOV. WARHBURN, presided.

The committee appointed to consider the terms and receive the transfer of the farm, reported that they had met a committee from the Board of Trustees, at the farm, on the 24th of March last, and completed the transfer, and passed over into the hands of the Board of Agriculture, all the land, with the exception of an acre or two immediately about the institution, together with the stock, fodder, farm implements, &c. &c. On the 29th of the same month, the same committees made an appraisal of the property, of all sorts, and entered the same upon the instrument of transfer.

The act authorizing the transfer was then accepted by the Board, together with the agreement and the appraisal of the committees, and the whole report of the committee was accepted.

The Board then adopted a code of By-laws, for the future government of its affairs, the second section of which is as follows:—

Sect. 2.—There shall be annually elected by the Board, a superintending committe of the farm at Westboro', consisting of eight members, whose duty it shall be to meet at the farm once in each month, and oftener if they deem it necessary, to make such arrangements and give such directions to the farmer as the various crops, trees, stock, and other interests of the farm may require. This committee may be sub-divided, and give direction to its divisions at its own discretion, and shall report fully to the Board at each of its quarterly meetings.

The committee appointed under this section is as follows:

MARSHALL P. WILDER,
MOSES NEWELL,
SIMON BROWN,
B. V. FRENCH,
JOHN BROOKS,
J. A. NASH,
HENRY M. CLAPP,
SETH SPRAGUE.

The Board then directed that the committee appointed to superintendent the farm operations, cause a survey of the farm to be made, with a plan of the whole, accompanied with suggestions for general improvements, to be submitted to this Board at the quarterly meeting in July.

MESSRS. BROWN, WILDER and WRIGHT were elected a committe on Finance.

MESSRS. PAGE, BREWER and Smith were appointed a committee to audit the accounts at the close of the fiscal year.

After the several items of business had been disposed of, there was a general conversation, occupying considerable time, in which the members of the Board expressed their opinions of the true mode of managing the farm, and it was found that upon most of the important points, there was a harmony of opinion which promises much in all future operations.

On Wednesday, April 11, the superintending committee met at the farm, and after a general survey of the fields, pastures, stock, implements, &c., assembled at the farm house, and organized the committee by the election of Mr. FRENCH, of Braintree, as chairman. It was then *voted*, 1. To direct the farmer to prepare the land for such crops as it is contemplated to put in this spring, according to a schedule heretofore prepared by Mr. BROWN and the Farmer, and now laid before the committee.

2. To sub-divide the committee of eight into four sub-committees, as follows:—1. On the survey, plan, and general improvement of the farm. 2. On the purchase, sale, and feeding of stock. 3. On the field and garden crops. 4. On providing and regulating the labor. And the sub-committees were elected as follows:

On general improvements, MESSRS. BROWN and FRENCH.

On the purchase, sale, and feeding of stock, MESSRS. BROOKS and NEWELL.

On the field and garden crops, MESSRS. WILDER and NASH.

On providing and regulating the labor, MESSRS. SPRAGUE and CLAPP.

The operative forces for the present management of the farm are now complete, as in addition to the duties detailed and specially assigned, the secretary of the Board will have a general supervision of the whole, and from time to time suggest whatever may seem to him to be deficient in the plan of operation, or whatever of additional energy ought to be imparted to it in order that it shall succeed.

But any striking results, either in the crops or the general improvement of the land, cannot reasonably be expected for the present. It must be a work of time to accomplish either. What lands are best adapted to particular crops, what fertilizers are best for these crops, what depth to plow, and when to sow and plant, are all questions which must be decided by careful practice and experiment. And so it must be with the stock and fruits. We can only hope, now, that the Board will bring its collective wisdom to bear upon a single point, viz:—that it will make a *correct*

beginning, so that every labor and expense shall contribute to a desired result, and that the example shall be one, worthy of imitation by every farmer in the State, as well as those who desire to embellish a private country home—that good sense and a pure taste shall be so blended with a wise system of practical farming as to satisfy the good people of the Commonwealth that there may be both beauty and profit found in rural life, when its affairs are properly conducted.

For the New England Farmer.

FARMING IN NEW ENGLAND—No. 5.

The constant deterioration of the soils in New England, and indeed, throughout most of the agricultural districts of the United States, is a fact of portentous and alarming significance, though it has not yet arrested very extensively the notice of the public. Probably there is no one fact, in our agricultural economy, of more pregnant interest than this, in its bearings upon our future prosperity. Some statistics, illustrating this downward tendency in our ability to produce the fruits of the earth, will now be given, and they will, I think, conclusively prove that a more prudent, skilful and scientific mode of cultivating the soil, is absolutely indispensable.

Between 1840 and 1850, three hundred thousand acres of land were added to those previously under improvement in Massachusetts. Ninety thousand acres were added to our mowing lands, and yet there was a relative depreciation of the hay crop during that decade of years, of 12 *per cent.* Our tillage lands, during the same term, were increased forty thousand acres, and yet there was an absolute depreciation in our grain crop of *six hundred thousand bushels.* The pasturage lands were increased more than one hundred thousand acres, with scarcely any increase of neat cattle, and a reduction of *one hundred and sixty thousand sheep, and seventeen thousand swine.*

The same law of deterioration is also observable in the richer regions of the South and West—showing, that with our present unskilful modes of farming, we are taking much more from the productive ability of our soils than we are returning to them, and that our agricultural prosperity is really and constantly on the wane. This downward tendency is partially hidden from public observation by the vast products which are raised upon the new and almost limitless regions which are every year put under cultivation at the West; but the fact itself is still indubitable.

In the State of New York, between the years 1845 and 1850, 671,692 acres were added to those previously under improvement, and of course, there ought to have been at least a corresponding increase in the agricultural products of the State. But what was the fact?

The number of horses decreased 58,141.
Milch cows decreased 68,066.
Of other cattle, there was a decrease of 127,525.
Of sheep, there was a decrease of 2,990,624.
Of swine, there was a decrease of 566,092.
Of potatoes, the decrease was 7,255,066 bushels.
Of peas and beans, there was a decrease of 1,182,054 bushels.
Of flax, the decrease was 1,956,485 pounds.
Of wool, the decrease was 3,793,527 pounds.
Of wheat, the decrease was 270,724 bushels.
Of buckwheat, the decrease was 450,724 bushels.

There was an *increase* in the amount of corn, rye, oats, barley, hay, butter and cheese raised in that State, but no greater than would have been expected from the increase of the population, which was 494,323, during those five years.

In Tennessee, the number of cattle raised was

In 1840	822,861 head.
In 1850	750,765 head.
Showing a decrease of	72,096 head.

In Kentucky, more than nine-tenths of the entire area of the State are covered with farms. The number of neat cattle raised was

In 1840	789,098 head.
In 1850	755,312 head.
Showing a decrease of	33,786 head.

Horses and mules raised in Kentucky:

In 1840	395,553
In 1850	381,291
Decrease	14,562

It is estimated by intelligent farmers in Indiana, that their river bottoms, which used to produce an average crop of *sixty* bushels of corn to the acre, now produce only *forty.* In Wisconsin, which is younger still, it is estimated that only *one-half* the number of bushels of wheat are now raised on the acre, which were raised twelve years ago.

These estimates are based on the returns made to the Patent Office, and are as reliable as any now before the public. What, then, is the conclusion of the whole matter? It is this, that the soils of New England, after all the admonitions we have received upon the subject, are annually growing poorer, and that even the virgin lands of the Great West are rapidly becoming exhausted of their fertility. Other and better modes of cultivation must therefore be introduced and practiced, or our country—now the granary of the world—may at no very distant day, become dependent on other lands for its daily bread. Within fifty years, our population will undoubtedly reach the enormous number of *one hundred millions;* but the grave question is, how are these teeming myriads to be fed and clothed and educated, if our present impoverishing agricultural processes are to be continued? We have territory enough, and it is naturally rich enough to support a population of *one thousand millions*—a number to which we may yet attain—but how can they be sustained, unless some method is devised *to keep up* the productive capabilities of our country, and return to our liberally discounting soils, *as much*, at least, as we abstract from them? This is a problem, which many thoughtful and far-seeing men are beginning seriously to ponder, and which requires no little wisdom to solve.

The large annual exports of our surplus cereal productions, furnish no reply to the positions taken in this article, but rather go to corroborate them. Such surplus only shows that we are stimulating our farms to the highest point of present productiveness, for the sake of immediate benefit, while we are making no compensating returns to the acres on which we are levying such exhausting conscriptions. Our apparent prosperity is deceitful. We are attempting to fill our own pockets, at the expense of future generations.

Waltham, April, 1854. D. C.

For the New England Farmer.

MAKING MAPLE SUGAR.

SIMON BROWN, Esq.:—Dear Sir,—At the suggestion of my friend, Hon. F. HOLBROOK, I send you herewith a sample of Maple sugar, and accompanying it a statement of the process of manufacture which I have adopted after an experience of forty years in the business. The sample is not sent as one of *superior excellence*, but is a *fair average* of some half ton made annually, without any refining, in the manner described herein.

TAPPING.

This is performed with a half-inch bit, to the depth of from 2½ to 3½ inches, according to the size of the tree. A good, sound, thrifty part of the wood is selected, without much regard to the side of the tree. The buckets are made perfectly clean and sweet by scalding, both at the commencement and close of the season, and are attached to the tree by a small nail driven up close, so as to level the bucket. The spouts are made of dark colored wood, with a small orifice, so as not to attract the sun's rays, or dry up, and sharpened in such a manner as only to crowd at the surface of the tree.

The sap is gathered with a team, in holders standing upright on the sled, and is drawn directly from them by means of a spout with the strainer attached into the sugar house, which is built on a side-hill to favor this operation, and so save labor, and prevent waste. The sugar house is well-ventilated by doors and windows, and sufficiently capacious to hold all the fuel wanted, and also all the sugaring apparatus.

The boiling is performed in two sheet iron pans, of the capacity of 1¼ bbls. each, set end to end in a brick arch, 1 foot high in the door, with the chimney in the rear, and a cast iron door at the mouth, and another smaller one in the middle of one side to put in wood and give a proper draft. Such an establishment is capable of boiling away one barrel per hour, and will require about one-half cord of wood per 100 lbs. of sugar.

When so far boiled down as to apron from a tin dipper, it is removed to a smooth caldron kettle, set in an independent arch on one side of the chimney, and while still warm, about two quarts of skimmed milk per 100 lbs. of sugar is well stirred in, and then it is raised to boiling heat, and passed through the strainer frame. It is then put immediately into a brass kettle, (set in another arch on the opposite side of the chimney, in a movable manner,) and boiled down rapidly, until, when blown in bubbles from the sugar trier, it will rattle distinctly on the boiling sugar, when it it taken off, partially cooled in the kettle, stirred a little, and ladled into the caking moulds to prepare it for market.

APPARATUS USED.

A dipper made of double tin, holding one gallon.

A strainer frame made of four upright pieces of scantling (something similar to the frame of a table) with strips of board nailed on the top, and at the sides to hold them together. Nails are driven into the legs to which three strainers are hung, one above the other, by loops at the corners; the upper, being a common milk strainer, the next thicker, and the bottom one a very thick flannel. The syrup passed through this apparatus will be so perfectly pure that no sediment will settle, if it should stand ever so long, and there will be no need of boys to hold strainers till the patience even of a young "Job" would be exhausted.

A sugar-trier is merely an elastic twig, with a knot so tied in the end so as to leave an orifice of the size of a ninepenny bit. This is thrust into the boiling sugar, and makes good fun for the children to blow off the bubbles. If used as above recommended, there is no need of failing in sugaring off just right once in a hundred.

Caking moulds are made with a bottom of zinc, with strips of wood nailed on around the sides, and legthwise, into which are put partitions of zinc crosswise, making oblong cakes of any size and number on a mould which the manufacturer may fancy.

REMARKS.

By the above method the sap is never cooled until the sugar is entirely done; consequently a saving of fuel, labor and syrup is made, and in my opinion the quality of the sugar is better.

A half-inch bore is better than a larger one, as it does not injure the tree so much, and it will afford full as much sap, taking the season through The flow of the saccharine fluid depends mainly on the *depth* of bore, not on its *size*, as many imagine.

A nicer and whiter sugar may be made by doing it down slightly, and draining in a tub with a wet cloth on the top; but the flavor of the article is not so good as that of the cake sugar undrained. I come now to a point on which I have the misfortune to differ from most writers for the agricultural papers. The prevailing opinion seems to be, "that all sap will make equally white sugar with the same care and attention." I am satisfied both from analogy and observation, that this is a mistake. My opinion is that the nature of the soil has as much to do with the quality of maple sugar as it has with that of wheat or any other vegetable production. No two things in the vegetable kingdom are in every respect precisely the same. Their character depends in a greater or less degree upon the mineral and other substances in the soil. The sugar maple growing in a limestone soil takes up lime, as any observing man can easily discover by settling pure syrup strained as above described. I have sugared off the bottom of such syrup, and found it to be more than half pure lime, in a fine state of solution. It is very white, but will not adhere in a cake. Nearly all the very white sugar which has fallen under my observation at our fairs came from a limestone soil. The presence of gypsum undoubtedly would have the same effect, while iron would have an *opposite* one, and so of other minerals, according to their character. In selecting the ground for a sugar orchard, therefore, the preference should be given to such soils as have for a base, mineral substances affording a light color.

Please excuse the length of this article, for the subject is nearly inexhaustible, and for some of the notions therein I feel somewhat of the partiality of a father to his children.

Yours truly, IRA GOODHUE.

Westminster West, Vt., April 10, 1854.

REMARKS.—We are obliged to Mr. G., not only for the liberal samples of his excellent sugar, but

for the description of his process of manufacturing it, and remarks upon the soils best adapted to the sugar orchard. To us, good maple sugar is a luxury, and as an accompaniment to a great variety of common dishes it is unsurpassed.

NEW PUBLICATIONS.

LANDSCAPE GARDENING: OR, PARKS AND PLEASURE GROUNDS, WITH PRACTICAL NOTES ON COUNTRY RESIDENCES, VILLAS, PUBLIC PARKS AND GARDENS. By CHARLES H. SMITH, Landscape Gardener, Garden Architect, &c., with Notes and Additions, by LEWIS F. ALLEN, Saxton, N. Y.

There is no man, permanently settled on his farm, but may profitably introduce something of landscape gardening about his house; it may be *a very little*, but that little will give the whole premises an air of neatness and comfort and attraction which larger and more pretending homesteads shall utterly lack. We have seen a tenant so beautify the premises which he was occupying by virtue of a lease, and with little prospect of remaining after that lease had expired, that the whole property was considerably enhanced in value in the course of a few years. This was done with a view to supply his table with the common garden fruits and vegetable, but at the same time the promptings of a true taste were indulged, and the beautiful grew up under his hands, as well as the crops he was cultivating.

But this taste for the beautiful, if natural to all, has never been developed, and something is needed to excite it and lead it on. Good examples among us, in such a degree of landscape gardening as would be feasible to all, would do much, —but we must have other helps. The book before us, may prove such a help. It is plainly written, gives all the suggestions necessary to begin and complete a desired plan. In some respects it is not adapted to our climate and mode of living; but the notes by Mr. ALLEN,—one of our most practical farmers, as well as a gentleman of fine taste in rural art,—will obviate any difficulty on that score. The book is well printed on large, fair type, and sold at $1,25, by Tappan & Whittemore, Boston.

EDDY ON BEE-CULTURE, AND THE PROTECTIVE BEE-HIVE. By HENRY EDDY. With an introductory notice by Dr. J. V. C. SMITH. Damrell & Moore: Boston.

Dr. EDDY has evidently given the subject of Bees, and the Bee-Hive, much attention, and has treated the subject simply and intelligibly, so that those who "run may read and understand." His teaching, we believe, is safe throughout, and the bee-keeper will find it valuable.

THE PRACTICAL FARMER.

The second number of this newspaper is before us—the first was duly received, but was spirited away before we had time to read it. It is a large and handsomely printed sheet, and filled with valuable and practical articles. Its Editors are already well known to the public as the Editors of the *Journal of Agriculture*, which paper will hereafter be made up from the agricultural portion of the *Practical Farmer*. We welcome to the field every co-worker in the great art, and hope to see good husbandry spring up everywhere from the suggestions and teachings of this *Practical Farmer*. Boston: William S. King, Editor; Prof. J. J. MAPES, and LEVI BARTLETT, Esq., Associate Editors.

TRANSACTIONS OF THE NORFOLK AGRICULTURAL SOCIETY, for 1853

Like its predecessors, these Transactions are of high interest, The Address, by the Rev. F. D. HUNTINGDON, is an excellent one; many of the reports are made up in a condensed form and are instructive. The society is prosperous and useful. In another column we give a report from these pages on milch cows.

TRANSACTIONS OF THE BERKSHIRE AGRICULTURAL SOCIETY.

The Transactions of this society are before us, and denote a growing interest and wholesome progress in old Berkshire. The Address was by JUSTUS TOWER, the President of the Society, and is a good one. The printer, in this case, does not do himself so much credit as do the farmers.

"GO FORTH INTO THE COUNTRY."

Go forth into the country
From a world of care and guile,
Go forth to the untainted air,
And the sunshine's open smile;
It shall clear thy clouded brow—
It shall lose the worldly coil
That binds thy heart too closely up,
Thou man of care and toil!

Go forth into the country,
Where gladsome sights and sounds
Make the heart's pulses thrill and leap
With fresher, quicker bounds.
They shall wake fresh life within
The mind's enchanted bower;
Go, student of the midnight lamp,
And try their magic power.

Go forth into the country,
With its songs of happy birds,
Its fertile vales, its grassy hills,
Alive with flocks and herds.
Against the power of sadness
Is its magic all arrayed—
Go forth and dream no idle dreams,
O, visionary maid!

Go forth into the country,
Where the nuts' rich clusters grow;
Where the strawberry nestles 'mid the furze
And the holly-berries glow.
Each season hath its treasures,
Like thee all free and wild—
Who would keep thee from the country,
Thou happy, artless child?

Go forth into the country;
It hath many a solemn grove,
And many an altar on its hills,
Sacred to peace and love.
And while with grateful fervor
Thine eyes its glories scan,
Worship the God who made it all,
O, holy Christian man!

Dublin Univ. Mag.

For the New England Farmer.

MONTHLY FARMER FOR APRIL.

Without in the least disparaging the abundant labors of the editor, which certainly indicate no ordinary degree of ability, experience and industry, the careful reader will perceive that for much of its attraction and interest, the *Farmer* is indebted to correspondents. Including brief inquiries and suggestions, we find that the Number for April contains forty distinct contributions, from probably about as many different individuals. If it be true that, "In the multitude of counsellors there is wisdom," the readers of the *Farmer* certainly have a good prospect of becoming wise. But how long would this continue to be the case, did not the correspondents of the *Farmer*, like guests at the mansion of a true gentleman, feel that they are at home,—free to speak, and act, and be, themselves,—with no sense of intrusion, no fear of some "iron-bedstead" that is to test their dimensions? We annex lists, of correspondence, Editorials, Selections, and Illustrations, for the April Number, in the order of paging.

CORRESPONDENTS.

Amasa Walker, (Mass.).....Potato Rot.
F. Holbrook, (Vt.).....Raising Pork.
C. Goodrich, (Vt.).....Pruning Orchards.
——, (Mass.).....Bee Culture.
Henry Holmes, (Vt.).....Churns.
*, (Mass.).....Manures.
J. H. S., (Conn.).....Super-phosphate of Lime.
D. C., (Mass.).....Farming in New England.
J. S. Gregg, (Vt.).....Churning.
Elsie, (Wis.).....Country Home.
B. F. Butler, (N. H.).....Peaches killed by Cold.
A., (Mass.).....Implement Fair.
N. P. Morrison, (Mass.).....Fruit Raising.
C., (Vt.).....Home Guano.
P., (Mass.).....Agriculture in Massachusetts.
P., (Mass.).....Experimental Farms.
——, (Mass.).....Feed of Stock.
A city Mechanic, (Mass.).....City and Country Life.
J. Richardson, (Mass.).....Decomposing Bones.
Jane A. Morrison, (Me.).....Profits of Sheep.
Joseph Howe, (Mass.).....Cooked Meal.
G. F. Nutting, (Vt.).....Dr. Greene's Fence.
R. M. Copeland, (Mass.).....Ornamental Grounds.
H. F. French, (N. H.).....N. Y. city R. R. and Stables.
New Subscriber, (Vt.).....Ashes—Holdfast.
H. B. Minch, (Ohio.).....Prices of Produce.
And Fourteen others.....Make Inquiries and Suggestions.

EDITORIALS.

Calendar for April.
First Annual Reports of the Sec. State Board.
Where does all the Corn go to?
Seed Sower.
Reports (14 cols.) of 7th, 8th and 9th Legislative Agricultural Meetings.
Solid and Liquid Excrements of Animals.
Improvement of the Dairy.
Milk and Butter Cows.
Spirit of the Agricultural Press.
Steel Double Plow.
House Ashes.
Report Concord Farmers' Club.
Extracts and Replies.

SELECTIONS.

Concord Grape—State Premiums on Dairy—Remedy for Garget—How I saved my Currants—Carrots—Sheep—United States Agricultural Society—Soaked corn for Horses—Asthma cured by Plaster of Paris—Ancient Spinning Wheel—Onions, Breadmaking, &c.

ILLUSTRATIONS.

Seed Sower—Concord Grape—Steel Double Plow—Unimproved Homestead.

Notwithstanding the condensed form of statement adopted and the small type used in the foregoing table of contents, does it not present a formidable-looking text for the poor reviewer? To give every topic an appropriate notice, and every writer "his meat in due season," would require more "heads" in his discourse, than parson Prosy ever allowed in a sermon. He has not the courage to make the attempt, this month. Nor does there seem to be need of it. The April number is a capital one—it speaks for itself. Who that has read it will spare it from his files, for the cost of a year's subscription? A single number of the Monthly Farmer, in which a HOLBROOK shows how farmers can make both money and manure by raising pork in New England; a GOODRICH and a MORRISON, discourse on Fruit and fruit-trees; a FRENCH describes a stable two hundred feet square, and two stories high, where four hundred city horses are kept and fed under a discipline as strict as a Napoleon could desire; and a COPELAND shows what a garden should be; in which a city girl, now the wife of a Wisconsin farmer, tells us how she enjoys "a cow, a pig, and some chickens," and a farmer's boy relates his experience as a city mechanic; in which the proceedings of three Legislative Agricultural Meetings are recorded; in which a native grape, worth five dollars a vine, is pictured and described,—I submit, that a single monthly of whose contents all these articles are but specimens, is as much beyond the criticism as it is above the commendation of A READER.

Winchester, April, 1854.

For the New England Farmer.

A GOOD YIELD OF BUTTER.

MR. EDITOR:—I own a cow, who is 5 years old; she calved the 22d of January, 1854; weight of the calf at 4 weeks old, was 78 lbs., sold for 10 cts. per pound: The cow now gives 10 quarts of milk per day; so much for the calf and milk. Now for the butter, which is as follows: Last Wednesday night I measured 2½ quarts of milk from a pail which contained all the milk my cow gave at that time, which was 5½ qts. I strained it into one pan, set it into my pantry, which opens into a warm room; the next night I measured the same amount into another pan, which made 5 quarts, and set it into the same room. Last Saturday my wife skimmed both pans of the milk, and put the cream all into one pot, and by stirring it from 5 to 10 minutes it produced a nice lump of butter which weighed 15 ounces. So much in the month of March. You shall hear from this cow again in the month of June. A. BROWN.

East Abington, Mass., March 6, 1854.

LARGE PUMPKINS.—Having had good success the past season in raising fine large pumpkins, I will give you my plan and experiment. The ground planted was a warm, clayey loam, descending to the south. I planted the 20th of May, with corn and one and two pumpkin seeds in a hill, used about one table spoonful of plaster, or gypsum to the hill. The field was a clover sod, plowed once and harrowed three times. When the vines commenced to run, say one foot in length, I gave them a careful hoeing. After the fruit was well set, or some was six to eight inches in diameter, I covered the stem, and a small portion of the vine joining the stem, with moist, loose soil; the result was, that roots directly from the stem of the pumpkin were formed, and the fruit derived sustenance, and plenty of it, judging from the size and weight, which was from eighty to ninety pounds.—*Plowboy.*

For the New England Farmer.

GREEN CORN FOR COWS.

Allow me to make a few statements through the columns of your paper, in regard to what is so commonly known in Massachusetts and in parts of N. H., yet so seldom practiced in this section of Vermont and many parts of Massachusetts, even—the practice of supplying cows with a cheap and valuable kind of food at that season of the year when drought or rain, grasshoppers or none, the freshness of June feed is past, and common cows and common pastures alike "begin to shrink."

Most farmers in this vicinity consider it one of the "*necessary* evils" that, during August and parts of the adjoining months, their cows should be either half-starved or allowed to re-roam over the oft-trodden pastures, and be content with a supply of withered grass, or browze from the neighboring woods. The result is, of course, a *scanty abundance* of milk, butter and cheese, and instead of the cows gaining in flesh and preparing for their winter service, are reduced in flesh, and before dog-days are past, too many of them become "spring poor," and when they come to the barn for winter, look so much worse for the "wear," that one must conclude that the whole summer's feed has "*run to milk* and not to flesh."

In the spring of 1852, two bushels of the *southern yellow*-flat corn were procured and sowed in the usual way, i. e. in drills 3 feet apart—manuring well, and taking care that the corn be so thick in the drill that no stalk should grow more than an inch in diameter. The season was unusually dry, and some farmers were obliged to feed out hay to their cows. Those who were prevailed upon to "try" the new notion had corn in plenty from the 1st of August to the 20th of September.

The result was, this "book farming" plan met with universal approbation, and in the spring of 1853, the procurer was requested to supply his neighbors with seed to the amount of *thirty bushels*. Most of this was sowed within two miles of this village.

After this fair trial during the season past, our farmers estimate the value of this feed to each cow, to be from three to five dollars, over the usual practice of *grass* feeding only. This is made up by the milk and condition in which the cows are found when coming to winter quarters.

During the present month, those who wish for corn are sending in orders for their supply, and if we may judge by the present amount called for, full 50 buls. will be sown in this vicinity the present season.

As dry fodder, we think a larger amount may be raised on an acre than of any other substance we have yet been acquainted with. I have cured the growth on six square rods, and fed one medium size cow, giving her all she would eat, (after cutting with a straw-cutter) in thirty-seven days. Thus the crop from one rod kept the cow a little more than one week.

The difficulty in curing will be an objection to its general use on a large scale, but as *green* feed we know of nothing its equal, when compared with the expense of raising.

The question is often asked, "Why is not our *common corn* just as good?" An equal amount *is* as good. But the quantity on the same ground is very much less than of the southern, and it will not reach a size fit for cutting as early.

Our garden *sweet corn* is raised in some places with success, and but for the trouble of preparing seed for future use, would be more valuable for the latter part of the season.

The southern corn may be had of Messrs. H. & S. P. Hill, No. 58 Main Street, Charlestown, and of any grain dealer in the cities, and in many of our villages.

I prefer stabling my cows through the summer (thus saving all the manure, both solid and liquid) and then feed them in the morning. In this way cows will not acquire the "*habit*" of waiting around the gate in the pasture, in the latter part the day, as when fed at night.

Plant about May 10th, June 1st, and June 15th, so as to keep a *tender* supply from July 2d, through the month of September. G. F. H.

Randolph, Vt., April 15th, 1854.

EXTRACTS AND REPLIES.

HOP ROOTS.

Mr. ORSON HADLEY, of *Hyde-park, Vt.*, informs us that he can furnish Hop roots for 25 cents for one hundred, ready to plant, and that they can be sent by mail, at trifling expense.

HENS—SHOATS—GRINDING CORN.

M. B. C. RICH, *Mount Vernon, Ohio.* In reply to your inquiries about the kinds of hens and shoats which are considered the best in New England, we have to say that the Shanghai, Cochin China, Black Spanish, Golden Poland, and perhaps one or two other varieties, have their several admirers. The flesh of the large kinds, in juicy tenderness and richness of flavor, bears no favorable comparison to that of our common fowls. Some of the mixtures, as the Shanghai and Cochin China, are great layers, and good mothers. The Buck's county, Pa., fowls, are about the right size, are good layers, and are good on the table. The Dorkings are a similar variety, and upon the whole, would probably prove as valuable a variety as any we have.

Suffolk Swine bear off the palm at present in pigdom. It is an excellent breed—is quiet, grows well and lays on fat readily, and when well served upon the table would make any reasonable Jew regret that he had forsworn pork.

There are a variety of mills used for grinding corn, by hand or by horse power, and are for sale in the agricultural warehouses.

THE YELLOW LOCUST.

I have about ten acres of land, on which I wish to grow the Yellow Locust—will you inform me how to prepare the seed so that it will vegetate—where the seed can be obtained and price? also, whether the seed should be planted where the tree is to remain, or is it *necessary* to transplant?

Windsor, Vt., 1854. GEO. B. GREEN.

REMARKS.—Some attention has been given to the cultivation of the Locust as a forest tree, in

various parts of the country, and we believe with pretty good success. The tree grows rapidly and produces timber of great value. We have never prepared the seed for planting, but can say how it has been done by others; and on reference to some of the best English works, we find the practice by our own people sustained by some of the best writers on the planting and preservation of forest trees.

Doct. SAMUEL BARD's method of preparing the seeds was to pour boiling water on them, and let it stand and cool. The hard outer coat would thus be softened, and if the seed swelled by this operation, it might be planted, and would soon come up.

Judge MITCHELL, of North Hempstead, Long Island, took a quantity of seed and put it in an earthern pitcher, and poured upon it water near to boiling. After standing 24 hours, he turned off the water and selected the seeds that were swelled by this application of heat and moisture. To the remainder he added hot water again, and after 24 hours, selected as before, and so again the third time. He planted the seeds in drills about four feet apart, and in eight or ten days they were all above ground. About three years after this, these were transplanted on a side hill of waste ground which had lain for many years uncultivated, which was soon improved by the addition of a large grove of valuable locust trees, in the most thrifty condition.

Prof. HENSHAW put some seeds into boiling water; others he actually boiled 1½, 3, 6, and even 15 minutes; he planted them afterwards in the earth, and they all sprouted and grew in half the time that seeds did which had not been boiled or soaked. When young, the plants must be protected from cattle.

Dr. DROWN, of Rhode Island, says that "the easiest method of raising the locust is as follows: Plant fifteen or twenty trees on an acre, and when fifteen or twenty feet high, run straggling furrows through the ground, and wherever the roots are cut with the plow, new trees will start up, and will soon stock the ground with a plentiful growth."

GOOD BEEF.

HORACE BULLOCK, Esq., of Rehoboth, recently slaughtered a beef which I think is worthy of being recorded in your valuable paper. It had been stall-fed with meal for about one year; age four this spring. It weighed as follows:—Gross weight, 1681 lbs., dry weight, 1200 lbs.; rough tallow, 119 lbs.; hide, 111 lbs. The girth was 7 feet, 1 inch. The meat was sold in this city for $8,50 per hundred, which taking into consideration the high price of all kinds of provision, was very cheap.

Providence, R. I., March 18, 1854. E. D. B.

THE EDITOR INDULGES IN A BEEF STEAK!—Beef Steaks is riz, most certainly—but we could think of nothing else so appropriate wherewith to taste and try the *Tomato Ketchup*, of friend CUTTER, of Pelham, N. H. Beef steak, and Tomato Ketchup! Any description would be of little aid and comfort; would only "make the mouth water," without sustaining the stomach; you must buy them yourself. CUTTER prepares a small ocean of the ketchup annually, and if any body can do it better, his bottles have n't made their appearance this way. That's all!

PERUVIAN GUANO.

The notice which we have recently been led to take of various estimates of the supply of Guano at the Chincha Islands, has induced a friend to send us a statement or report, made and published in England in December last, by Geo. Peacock, F. R. G. S. The statement is founded upon a personal survey, made by Mr. Peacock during four months special devotion to the subject, in an open boat, all along the coast of Peru. His survey was made at the instigation of the Br. Government, with a promise of 1000 tons of guano as compensation, which promise, it is said, has never been fulfilled. The English holders of Peruvian bonds, secured by the proceeds of the guano islands, began to apprehend a failure of their guaranty; and hence, probably this survey. As to the Chincha group, Mr. Peacock says:—*Journal.*

"I estimated in 1844 that the quantity remaining on the northern island alone, was at least ten millions of tons; although it had been worked by the Indians from time immemorial, and although a very large quantity had been removed since the permission of its first exportation to Europe in 1841; besides the immense quantities that had been used by the Peruvian farmers since the conquest. At this time (1844) I measured the cliff of pure guano lying in a north-east and south-west direction, where it had been worked in upon from the north-west verge of the rocky basement towards the middle ridge of the island; I found it to be 85 feet perpendicular, and I calculated that by the time the workings had reached the summit or crown of the hill it would be at least 100 feet in section to the rocky base, all pure guano.

I did not examine the other two islands, merely landing on them, the deposits there not having at that time been opened upon; but Senor Villa, who examined them in 1842, declared that they contain, in his opinion, considerably larger quantities than the northern island, the middle one being the largest of the three. A rough estimate was formed that from 40 to 50 millions of tons existed on this group. Senor Don Francisco de Rivera, the late charge d'affaires of Peru in London, who was entrusted with my plans and estimates of the new guenaros discovered by me, found (as I was informed in 1846) that valleys filled with guano to the level of the surrounding hill of this material, upwards of 120 feet in depth, existed in the Chincha group, and that the quantity might be said to be practically inexhaustible during the present generation.

However, independent of these immense deposits on the Chincha Group, the Lobos, Guanape, Huaura and other islands upon the north-west coast of Peru were estimated by me to contain some five millions of tons of it, at least; whilst that truly

wonderful sugar-loaf shaped peninsular, the Pavilion de Pica, in the province of Tarapaca, still contains some four or five millions of tons; and whilst the Hunnillas, Chipana, Lobos, and other known guaneros on the south coast of Peru, between Iquique and the river Loa, contain some four or five millions more amongst them. Thus, independent of the Chinchas, there are some thirteen or fourteen millions of this invaluable manure still known to exist, and I am therefore of opinion that the holders of Peruvian stock need be under no apprehensions of their guarantee falling short whilst the demand for this indispensable article remains practically inexhaustible, as I firmly believe, with Senores Rivera and Villa, it to be."

PREPARING SEED CORN.

As the planting season is now near at hand, it may be useful to present such modes of preparing corn for planting, as appears to have answered the purpose desired. We therefore append two modes. The first is from O. F. Marshal, of Wheeler, N. Y., and the other is from a correspondent of the *Albany Cultivator*, who dates at Xenia, Ohio.—*Ger. Telegraph.*

1. I have made frequent experiments in preparing seed corn, without success, except one made last spring. I took soft soap, put some in a kettle, warmed it over the fire, put in the seed corn, and gave it a good stirring, adding as much plaster as would adhere to the corn. The corn came up good and quick, and looked vigorous and healthy. The alkali in the soap is a strong fertilizer. The wire worms did not disturb that planted with the seed soaped—that part not soaped, was injured more or less by the worms. Lest some should attribute the manifest difference between the soaped and unsoaped seed, to the plaster, I took some thick molasses, put a few quarts of seed in a kettle, as above stated; there was as much plaster attached to this seed as to that soaped. The greater part of the field was planted with seed in its natural state. The soaped seed came up the quickest and best. Will others try the experiment?

2. Take a tight vessel of convenient size, into which put the seed corn, adding sufficient warm water to cover the corn; the water so warm that the hand cannot be kept in it; stirring the corn a few times, that it may be thoroughly wet, letting it stand in the water from ten to twelve hours, then take the corn out of the water, and put it in a nice pile on the barn floor, cover it with a blanket for the space of two nights and one day, then plant as soon as possible.

My informant says (having confidence in him in this matter,) that on last year, his seed corn treated as above, came up *so well*, that he had not to replant *any*, while the *same variety*, planted on the same day, in the same field, and not treated as the above, but dry, came up very indifferently, having to be replanted.

What is still better, (says my informant,) the prepared seed came up sooner, and apparently kept a week in advance in the growth during the season.

The End of Life.—No man has a right to live solely for himself; but should live to do good, and scatter blessings all around him.

For the New England Farmer.

EXTRAVAGANT PRICES FOR STOCK.

Mr. Editor:—Sentinel as you are on the watch-tower of the farmer, it is your duty to give the alarm, when danger is near. Within a short time, we have seen accounts of prices most extraordinary, paid for "full blood animals" purchased in England, to be introduced to this country. Instance at the sale of Lord Ducie's Stock, it is said £100 was given for a bull;—£700 for a cow;—£350 for a calf, 6 weeks old, only;—and so on;—clearly indicating *a mania* in this matter. I am pleased to see, that the Editors of the *Farmers' Companion and Gazette*, a well conducted journal at Detroit, Michigan, have cautioned their readers against such follies, page 34, of current volume;—and assured them, that as fine animals as were ever reared, can be introduced from England, at less than one-quarter part these prices. It adds nothing to the intrinsic value of an animal, that its ancestor was a Peer of the Realm. Republican as we are, we are easily captivated by baubles. We are well assured that first class animals can be purchased and imported from England, at a cost not exceeding $250 each.

April 19, 1854.

DO SOILS LOSE THEIR MANURES BY LEACHING?

Not often. 'Tis only the coarsest sands or gravels, and such as are almost wholly destitute of clay or vegetable matter, that permit manures to pass downward through them. Nearly all soils absorb the valuable portion of the manures which have dissolved by rains after application, before it has descended five inches. To be satisfied of this, one has only to examine the soil at the bottom of a barn-yard, and he will find a few inches only that have become at all charged with the fertile extract of the superincumbent manure.

The true source of escape is by evaporation. If only partially buried, or the soil is principally silicious and coarse, the ammonia, carbonic acid, and other fertile gases, which may have been developed by decomposition, or dissolved by rains, may evaporate from the surface or through the loosely associated particles of the soil, and pass off into the general storehouse of the atmosphere. And it is in this way nearly all manures escape from the soil. A perfect correction of this defect, is to bury the manures at a sufficient depth, and keep the soil above, well supplied with vegetable water, both living and dead.

We have seen the principle above asserted, most fully proved by the appearance of a muck heap made by compounding fish with loam. When made with a single layer of Manhadden or Moss Bankers in the middle of a heap four feet high, the oil and other fertilizing matters dissolved in the decay of the fish, has been found to mark distinctly to the eye and smell all the superincumbent mass of earth while it had not reached four inches below it. A clear understanding of the road manures travel, may aid many a farmer to arrest their progress, who would otherwise spend a large amount in unavailing efforts to secure them from their fancied escape in another direction.—*N. Y. Agriculior.*

For the New England Farmer.

SEEDING LAND TO GRASS.

MR. EDITOR:—There are few, if any, operations in husbandry of more importance to the farmer than that of *seeding land to grass.* Nor are there many operations concerning the mode of performing which, there is more variance of opinion. Some favoring spring, others fall seeding; some contending for heavy seeding, others for light. So important and oft recurring is this operation of the farm, that it would seem strange that the best mode has not long since been decided, beyond all controversy. The purchase of grass seeds is quite an item of money expense; its failure to produce its desired return is followed by a still heavier loss in the time and labor expended in applying it to the soil, and the season's crop of grass.

The practice of seeding in the spring, with some kind of grain, generally oats, is, I believe, too hazardous and uncertain. Every farmer knows full well that one of the greatest obstacles with which he has to contend in New England is *drought.* That his grain with which he seeds in the spring is ready for harvest at a season when drought is most likely to ensue. That during the growth of the grain, the blades of grass are kept from making much if any progress; the shade of the grain rendering them weak and tender. That the removal of the grain at once exposes these feeble plants to the scorching rays of an almost vertical sun, which withers and burn them up beyond recovery. The greater portion of these plants are so small at the time of harvesting the grain, that they escape the too often casual observation of the farmer, and when the sun has burned them up, he concludes the seed was worthless, and forthwith blames the seedsman for the failure of his crop. Many thousands of dollars are thus annually lost in Massachusetts alone. I have tried this mode of seeding, and am satisfied that it is altogether too hazardous an operation to be tried the second time. Fall seeding, too, if left undone later than the first of September, is also dangerous, both from early and late freezing and thawing of the ground, which destroys the plant in its weak and feeble hold upon the soil. Summer seeding at the last hoeing of corn is in favor with many farmers, but this method of seeding, has always appeared to me, to be a slovenly mode of farming—perhaps not necessarily so, if sufficient pains were taken to keep the ground level, and to cut up the corn below the surface, which is seldom done.

Last season I determined to seed down in August having taken a crop of oats from the land, it having been planted two years with corn; having harvested the oats which stood a few days longer than was desirable, I carted on ten ox cart loads of good barn-yard compost to the acre, plowed it in, harrowed and sowed herds grass, red top and clover. In a few days the land was well covered with a second crop of oats from the seed scattered in the process of harvesting, the grass came up finely and the field presented a very beautiful appearance. By the first of October the oats had got up a foot high. I turned my milch cows in for one hour a day at first, and when partly fed off, prolonged their stay to two hours. Such a field of green fodder, at such a time, proved a valuable acquisition. The grass continued to thrive, and now presents a very promising appearance. The oat stubble left in the fall, has, I believe, been no unimportant protection to the young grass roots through a hard winter.

So highly satisfactory was this operation, that I shall pursue it again this season—sowing about two bushels of oats to the acre with my grass seed. The advantages, I deem to be three-fold. First. if your seed is good, you will be sure of not losing it by drought or early frosts; secondly, it affords an economical opportunity of applying a little fresh food for the support of your future crops, thus laying the land to grass in such good heart, that if it has been dealt with properly in its previous cultivation, it will need no top-dressing (which in my humble judgment is a most extravagant expenditure of manure, except upon low, wet lands) until it is again taken up for cultivation. And, lastly, it gives you a fine crop of green fodder at a season when it is greatly needed. T. A. S.

Westboro', April, 1854.

REMARKS.—The subject discussed above, is an important one, and we think suggestions may be found in this article worthy of careful consideration, as great losses are annually experienced in laying down lands to grass.

For the New England Farmer.

EXPERIMENTS, STOCK, CORN, &c.

MR. BROWN:—The assignment of subjects for experiments by the Concord Club, as presented in your paper this morning, is admirable. Let each of those who engage in these experiments, make an exact minute of their operations, at the time; and let the committee who assigned the subjects, have an eye to the several parcels under cultivation, at least once a month; and a mass of information will accumulate, of more value than is ordinarily presented in the report of any of our societies.

The butter products of your neighbor's Devon stock should no longer be questioned—since it appears that Mr. Hobart's native stock has done *twelve per cent. better* than his, on ordinary feed, alone. Farmers should learn from these, and other facts recently given to the public, that by proper care, in selecting cows for the making of butter, that double the quantity of butter can be obtained from the same quantity of milk, and generally, I believe, the less the quantity of milk from which the cream arises, the better the quality of the butter.

The well drawn statement of the farmer of Pelham shows that there is a profit in growing Indian corn, at fifty bushels per acre. If the yield is double this, as has been the present season, by several cultivators in the County of Norfolk, one rising as high as 129 bushels to the acre—it proves, that corn is not only one of the most useful, but one of the most profitable crops, that can be grown. A careful analysis of these statements will show that where the hills were about two feet apart, four stalks in a hill, or *one stalk to each square foot of land,* the largest product was grown. Some excellent suggestions on the growing of Indian corn have recently appeared from the "model farmer" of Pembroke, and the "sound practical farmer" of Warner. There can be little hazard

in following the instructions of such men. Their locks have whitened in the service; and although the energies of their muscles may falter, the energy of their minds is unimpaired.

April 22, 1854.

For the New England Farmer.

COOKED AND UNCOOKED FOOD.

Mr. Brown:—The communication from Mr. Howe, in the *N. E. Farmer* of 18th inst., is certainly an important one, inasmuch as the very accurate and conclusive experiment with *uncooked* meal, for the feeding of swine, goes very far to establish the question that it is better than *cooked*; a question which has been very much debated. It contravenes the generally received opinions and practice of most raisers of pork.

I wish Mr. Howe, or some other extensive farmer, would extend the experiment to the various other articles, which are usually fed to swine. The expense and labor of cooking food for swine, as usually practised, is no small item in the cost, more especially for small farmers. I shall never believe, till I see some satisfactory experiment, that the food for swine, or other stock, requires to be cooked in order to be eaten by them, or that the process of cooking imparts additional nutriment. I should rather expect that the process of cooking might dissipate, by evaporation, some of the essential properties of the articles cooked.

The boiling or steaming of hay and straw, which has been heretofore suggested and recommended, seems to me to be a wild fancy.

Shall we undertake to pamper the appetites of our cows and horses with all the refinements of a French cook? Man departs from the original intentions of nature, by calling to his aid the various processes of the culinary art. The more plain and simple his food, the more perfect is man, in all the essential attributes of his nature. Those who indulge in the gratification of a pampered appetite are not the most efficient members of the community, and the direct tendency is to depreciation; hence, the continued revolutions in the social relations of society—the lesser indulgent classes go up while the more luxurious go down. The rich cannot resist the temptation to ease and indulgence which their riches give to them, and by which they are enervated and, consequently descend in the scale of their social relations.

I had written thus much before seeing the article from Mr. Holbrook, of Vermont, in your last. He has given us a very valuable communication, on the management and feeding of swine, and of the amount of pork made by a bushel of cooked Indian meal, which he thinks is better than *uncooked* meal. This is at variance with the experience of Mr. Howe, who made a pretty fair experiment with five pigs.

As has been before said, does the cooking add anything to the material stuff?

I do not know but swine or other stock might eat a little more of some food, when cooked, than when not, or when mashed up with the more palatable, might take some articles which they would refuse when given alone. But then it becomes a question whether those articles which would be refused alone, afford much appropriate nourishment. The Author of nature has given them instincts to discriminate between what is suitable for their support and what is not.

The farmers want an experiment made which shall decide for them this question, because if nothing is gained, the expense of boilers, fuel and much labor will be saved.

I wish Mr. Howe, Mr. Holbrook, or some other extensive raiser of pork, would institute a fair and careful experiment, and give us small farmers the benefit of it.

So far as my experience has been, and the experience of many good farmers, whom I have consulted, the practice of feeding swine with all the common articles raised upon the farm, without cooking, has been pursued with success. The grains, most roots and fruits are readily eaten, in their natural state.

If there are some which swine refuse, it is probable they are more suitable for some other kinds of farm stock, and would not do swine much good if they were forced to eat them.

Topsfield, March 28, 1854.

SETTING OUT CABBAGE, TOMATO, AND OTHER PLANTS.

Last spring we saw a farmer setting out a hundred cabbage plants in the following manner. The plants were pulled up from the seed bed without loosening the ground around them, and as this was pretty compact, three-fourths of the fibrous roots were broken off. He then made a round hole with a stick about half an inch in diameter, thrust in the plant, dropped in earth to fill up the hole, packed it down, poured on a considerable quantity of water, and then covered up the plants with a burdock leaf to keep off the sun's rays, and left them to grow as best they could. We requested the privilege of setting out twenty plants for him, and proceeded thus:

First, we went to the seed bed, and with a flat stick loosened and lifted up a quantity of dirt around the roots, taking care to break very few of the most delicate fibres. We next went to the cabbage ground, and with a hoe prepared a place for each plant by mellowing and pulverising the earth several inches in diameter. We scooped out a large hole with the hand, deep enough for a plant, and set it in carefully, with considerable loose earth still clinging to it. The roots were left spread out just as they had grown, finely pulverised soil was then sprinkled in to fill up the hole, and carefully pressed down around the plant. We then added about half a pint of filthy water from the swill-pail, and requested that the plants should be left without any protecting covering. Our farmer friend said he could never spend so much time with a few plants. But mark the result.

During the latter part of summer we visited the "cabbage patch," and found that of the 20 plants, one had been injured by a careless blow from the hoe, and one had grown feebly, while seventeen of them bore large, solid heads of cabbage. Of the eighty other plants set out at the same time in the same soil, fifteen only had large heads, twenty-nine bore heads of medium size, fourteen had barely lived and were not worth harvesting, while twenty-two had not survived the transplanting.

The next best preferable method we know of to set out cabbages is, to first *grout* them.—*American Agriculture.*

For the New England Farmer.

LUSUS NATURÆ.

FRIEND BROWN:—Knowing that you take a deep interest in all the productions of nature, whether natural or unnatural—normal or abnormal, I will give you an account of what I have met with, which seems to partake of the *Lusus Naturæ Imprimis*. Near the Crystal Palace, in New York, a pair of oxen were exhibited, said to weigh 9000 pounds. They came from the fertile West, where animals and vegetables, having abundance of room and no lack of nutriment, seem disposed to expand themselves. The keeper said they had been accustomed to hard work till within one year. He thought they had some Durham blood, but mostly native. What a contrast between these noble looking animals, and the little rats, we often meet with in some portions of our country, which become venerable with age, before they acquire sufficient size and strength to sustain a yoke!

What man has done, man may do. Every farmer may raise good cattle; he may not make them all weigh forty-five hundred pounds each, but 'twould be well if he were to aim at it.

There was also a Shetland cow, eight years old, and but thirty inches high. By her side was a calf nineteen months old, not yet weaned, nor having had a calf, though *giving milk*. This calf was half Ayrshire, and somewhat larger than its mother. Here is a case for dairymen and physiologists.

There were also Bakewell sheep with wool full three feet long. Query.—Why does not wool, like the covering of other animals, fall off when it ceases to be needed and becomes a burthen!

Last of all was a Jewish abomination—a pig, one-fourth Berkshire, three-fourths native, weighing *fourteen hundred and seven pounds*. Among the Irish tenantry, the pig, being set apart for the payment of taxes, is called the "Rent-payer," or the "Rent;"—such a "pig" at the present prices of pork would pay the rent of a larger estate than an Irish potato patch.

But obesity and monstrosity are not confined to the brute creation.

Col. WOOD, of Cincinnati, has now on exhibition in this city some rare specimens of humanity,—which prove conclusively that there are extremes in *human* nature.

It is a common remark that Miss, or Mrs. So-and-so, is a *great* lady. Now the *greatest* lady living, Col. Wood says, is Mrs. Scholey, a native of New Jersey, now a resident of Ohio. She weighs *seven hundred and sixty-four pounds;* one hundred and fifty pounds more than the celebrated Daniel Lambert. Her naked arm measures three feet and two inches, and her waist nine feet and a half. Truly her husband has his *arms* full, if not his basket full of blessings. Mrs. S. has a good countenance, is highly intelligent, and converses with freedom and great propriety. She is of German descent; says her grandfather weighed more than four hundred pounds; has two sisters who weigh more than two hundred pounds each; and a brother who weighs two hundred and fifty pounds. She has always enjoyed good health, eats no more food than other people, and much less than a dwarf who accompanies her, and is but thirty inches in height. She has tried, by dieting and by medical treatment, to reduce her weight—but without success. Next in this group, is Miss Richardson, of Alstead, N. H. She is nineteen years old, and weighs six hundred and seventy-four pounds; which is sixty-four pounds more than the great English giant weighed. The mother of Miss R. accompanies her, and is a small and lean woman. The father is said also not to be above the ordinary size; she rises and walks with apparent ease. Mrs. S. cannot rise without assistance.

So you see, Mr. Editor, New Hampshire produces not only great men, but great women; and New Jersey, too, may boast of women as great as any other sister State.

There is also, in this group, Mrs. Ellen Briggs, of Ohio, 32 years of age, the mother of three children, and but 30 inches in height. She is well proportioned—very graceful in form—has a good countenance, speaks English, French, and German, dances perfectly, and all that.

Now have not I proved that Nature, in the world of matter, plays some fantastic tricks? And does not every day's observation show, that in mind there are no less wonderful vagaries?

At the President's levee, on Friday evening last, I witnessed some rare specimens of animated nature without paying an admission fee.

The President seemed in good health and fine spirits. He certainly does the honors of the Executive mansion with ease and dignity.

The assemblage furnished a fine illustration of the levelling tendency of Republicanism. Jammed into the famous "East Room," side by side, shoulder to shoulder, were representatives of every grade in society. Whigs, Democrats, Free Soilers and Unionists,—Hards and Softs,—Hunkers and Progressives,—Liberals and Ramrods, military chieftains and soaplock dandies,—gentlemen and boors,—philosophers and dolts, stately matrons and coy maidens, beauty and deformity, pride and humility, wisdom and folly, Catholic and Protestant, American and European, all huddled together, cheek by jowl, in truly democratic style.

It is well that the "dear people" have access to their rulers, and well would it be, if their prudence should keep them mindful of the source whence they derive their power, and thus prevent them from enacting unrighteous laws.

Baltimore, Feb. 27, 1854. R. B. H.

SPECIFIC FERTILIZERS.

We would suggest to our friends who are about to use guano, poudrette, super-phosphate of lime, plaster, salt, salt-petre, or any other highly concentrated manure, to omit, in all cases, the application of them on a portion of the same field, so that it may be plainly seen whether the crop is any better where they are applied than where they are not. It is only through the aid afforded by such experiments that we shall be able to come to satisfactory conclusions as to their value. It is very important for us to know, not only that these manures *are* valuable, but also to know *how* valuable they are, in comparison with the common manures of the farm. In order to obtain this

knowledge, we must not only grow crops side by side, with and without the guano or other fertilizer, but must weigh and measure the crops themselves, grown on equal portions of ground. In such a process we can obtain valuable results, whether favorable or unfavorable.*

We agree with the *American Agriculturist*, that, "in applying commercial super-phosphate, which is in a finely-divided state, we do not think it necessary to mix it with any other substance, unless it is to come directly in contact with the seed. In the latter case, it should be well mixed previously, with a considerable quantity of muck, or rich earth, or even with loam.

"It is hardly worth while to apply less than 200 lbs. to an acre; on poor soils, or those of ordinary quality, 400 or 500 pounds per acre would not be too much. We prefer the latter quantity for experimental trials, though we would advise using different quantities on adjacent plots, in order to better mark the effects. 200 lbs. per acre would only allow about one pound to 218 square feet, which is a plot a little less than 15 feet square. This is only two-thirds of an ounce to a square yard. Double this quantity would be little enough from which to judge anything of its effects."

For the New England Farmer.

THE FLOWERS AND THE BIRDS.

FRIEND BROWN:—"The flowers appear on the earth; the time of the singing of birds is come, and the voice of the turtle is heard in our land."

So sang the great monarch of Israel, whose eyes were not too exalted to behold the beauties of nature and the exquisite beauties of the springtime thereof; whose ears were not so lofty but that he could listen, with delightful praises, to the great God who made him, to the sweet voices of the beautiful birds.

The splendid garniture of periodical birth, has again come to beautify the earth, the blithe birds have returned, bringing their sweet minstrelsy with them, to revisit the orchard, the meadow, the garden and the wood. Let them not be regarded as unworthy of the protection of the husbandman, and beneath his notice; nay, they are the friends of the farmer, and the companions of the cultivator, and "my Father made them all."

Let not the modest flowers be trodden under foot, or be passed by as a thing of nought, for they are beautiful; why then, should the farmer neglect them entirely? Rather let him cause some border to bloom with beauty; the affections will not suffer thereby, the heart will not become hardened by such labor; they will be a source of pleasure to the household, and will catch the eye of the traveller passing by; in short, where the flowers are cultivated and loved so well, stratagems and spoils can scarcely dwell. I. S.

4th mo., 1854.

☞ There is nothing more dangerous to the virtuous than association with the guilty who possess amiable and attractive qualities.

THE THRIFTLESS FARMER.

"Stop them hogs—what in the ——— the reason you didn't patch up that fence better, when you were about it! 'Stu-boy, 'stu-boy—yank 'em, Tiger, I'll learn 'em to keep out of the garden! Now fix up the fence and keep them hens out, or you'll ketch it."

Such were the ejaculations of *Farmer Thriftless*, on a bright May morning, when the hogs and hens for the hundredth time had broken into the miserable garden; but he had uttered these words as many times before, and the scene did not disturb his equanimity so much but that he resumed his seat under the dilapidated porch, and began to charge his old pipe with a new fill of tobacco. But his poor wife, whose sweet looks and sweetness of temper had been sorely tried by the confusion which had reigned supreme about her for many years, could not look on undisturbed. She loved order and quiet, and her meek and gentle spirit must soon leave the revels of creaking hinges and flapping doors, and all the wild disorder about her, for the undisturbed realms of the peaceful and quiet grave. Her last entreaty falls upon the ear of Farmer Thriftless like water upon the flinty rock. Young Hercules, with his club, and Tom Careless, with his hammer, were despatched in the words with which we commenced, to rout the enemy and repair damages!

Now, reader, behold them. First, the house, the Farmer, and his poor, over-worked, heart-broken wife,—the patched barn,—the doors,—the weathervane and the roof; the stacks, horse and cattle mingled in with broken wheels and other trumpery. Then in the foreground see the fighting cocks, the skeletons of diseased cows and hogs! See Tom cock his eye and scratch his head in beholding the youthful Hercules break the ribs of the hungry pigs, and put the fowls in a tremendous flutter. There is a life and truthfulness in the scene too sad for mirth, ludicrous as it is. Will any of *our friends* confess that *they* sat for the picture! We have endeavored to improve a little upon the suggestion of our excellent brother of the *Pennsylvania Farm Journal*, and hope to receive his approval. The *Fort Wayne Times* comes to our aid, too, in the life-like portrait before us Now "look on this picture, and then on that" which we shall give next week, and judge for yourselves of the merits of each.

The thriftless farmer provides no shelter for his cattle during the inclemency of the winter; but permits them to stand shivering by the side of a fence, or lie in the snow, as best suits them.

He throws their fodder on the ground, or in the mud, and not unfrequently in the highway; by which a large portion of it, and all the manure, is wasted.

He grazes his meadows in fall and spring, by which they are gradually exhausted and finally ruined.

His fences are old and poor—just such as to let his neighbor's cattle break into his field, and teach his own to be unruly and spoil his crop.

He neglects to keep the manure from around the sills of his barn—if he has one—by which they are prematurely rotted, and his barn destroyed.

He tills, or skims over the surface of his land, until it is exhausted, but never thinks it worth while to manure or clover it. For the first, he has no time, for the last he "is not able."

He has a place for nothing, and nothing in its place. He consequently wants a hoe or a rake or a hammer, or an augur, but knows not where to find them, and thus loses much time.

He loiters away stormy days and evenings when he should be repairing his utensils, or improving his mind by reading useful books or newspaper.

He spends much time in town, at the corner of the street, or in the "snake holes," complaining of hard times, and goes home in the evening, "pretty well *tore*."

He has no shed for his fire wood—consequently his wife is out of humor, and his meals out of season.

He plants a few fruit trees, and his cattle forth-

HOMESTEAD OF THE THRIFTLESS FARMER.

with destroy them. He "has no luck in raising fruit."

One-half the little he raises is destroyed by his own or his neighbors' cattle.

His plow, drag, and other implements, lie all winter in the field where last used; and just as he is getting in a hurry, the next season, his plow breaks, because it was not housed and properly cared for.

Somebody's hogs break in, and destroy his garden, because he had not stopped a hole in the fence, that he had been intending to stop for a week.

He is often in a great hurry, but will stop and talk as long as he can find any one to talk with.

He has, of course, little money; and when he must raise some to pay his taxes, &c., he raises it at a great sacrifice, in some way or other, by paying an enormous shave, or by selling his scanty crop when prices are low.

He is a year behind, instead of being a year ahead of his business—and always will be.

When he pays a debt, it is at the end of an execution; consequently his credit is at a low ebb.

He buys entirely on credit, and merchants and all others with whom he deals, charge him twice or thrice the profit they charge prompt paymasters, and are unwilling to sell him goods at any cost. He has to beg and promise, and promise and beg, to get them on any terms. The merchants dread to see his wife come into their stores, and the poor woman feels depressed and degraded.

The smoke begins to come out of his chimney late of a winter's morning, while his cattle are suffering for their morning's feed.

Manure lies in heaps in his stable; his horses are rough and uncurried, and his harness trod under their feet.

His bars and gates are broken, his buildings unpainted, and boards and shingles falling off—he has no time to replace them—the glass is out of the windows, and the holes stopped with rags and old hats.

He is a great borrower of his thrifty neighbor's implements, but never returns the borrowed article, and when it is sent for, it can't be found.

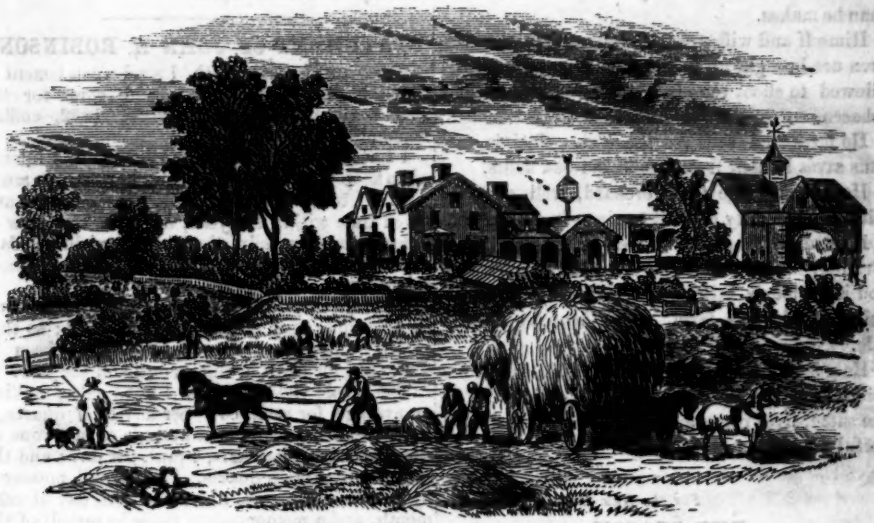
He is, in person, a great sloven, and never attends public worship, or if he does occasionally do so, he comes sneaking in when the service is half out.

He neglects his accounts, and when his neighbor calls to settle with him, has something else to attend to.

Take him all in all, he is a poor farmer, a poor husband, a poor father, a poor neighbor, and a poor Christian.

HOMESTEAD OF THE THRIFTY FARMER.

In contrast with the homestead of farmer Slack, already presented, we now give a view of the beautiful grounds and residence of farmer Thrift. And what an attractive home it is. What an air of neatness and comfort pervades the buildings; every board is tight, and every door swings true to its place. No broken windows or dangling gates, no old pots or pans, no old carts and wheels, mar the general appearance of order which prevails. What an animated scene the fore-ground presents! How stout and sleek are the horses—how vigorous the men—how appropriate the implements they are using! Children, reared and educated in such a home, will carry out influences with them to make the world a better and happier one. And then, to adopt the language of the *Pennsylvania Farm Journal*, the provident and thrifty farmer has three rules for regulating his business, which he observes himself and enforces on those around him, viz.: to do every thing in the right time, convert



HOMESTEAD OF THE THRIFTY FARMER.

everything to its proper use, and put every thing in its proper place.

He buys only the improved breeds of cattle, horses, sheep and swine, and keeps no more than he can keep well, either in summer or winter.

He always drives on his work and never lets his work drive him.

His animals are never under fed or over worked.

His outhouses, wood-shed, poultry house, pig pen, wagon house, spring house, and corn crib are nicely white-washed or painted on the outside, and kept clean and neat within.

He has a tool house, and a place for every tool in it, which may be wanted for any ordinary farm purposes, such as mending implements, making axe or hoe or fork handles, &c., and also for stowing carefully away, such as will not be wanted for another season.

He has sheds around his barn-yard, to protect his cattle from the weather, and warm, well ventilated stables for his cows and young stock, and also a cellar or shed, to protect his manure heap.

He has leaves or other refuse vegetable matter, together with soil from his headlands, convenient to his barn-yard, to compost with his manure heap, through the winter.

He does not allow the liquid manure to escape into the nearest stream, a quarter or half a mile from his barn-yard.

His barn, and sheds, and dwellings are all supplied with good spouting.

His fences are always in good order, and materials for repairing or renewal, are collected and made during winter.

His wood-shed is supplied with wood, cut in August, always one year ahead.

His wife never scolds, because she never has occasion to.

Her cellar and pantry are always supplied with the needful *raw material*, which she works up into a palatable form to fill up vacuums at meal times.

Heavy bread, cold buckwheat cakes and rancid butter are novelties which her gude man and the children have heard tell of by some of the neighbors, but have never seen.

When a friend or two calls to lodge, a plate of

good ripe Rambo apples, a pitcher of cider, and a dish of boiled chestnuts, are brought for discussion around the stove of an evening.

He considers it a duty to promote the circulation of agricultural papers, and has saved himself some hundreds of dollars by following the advice of the *New England Farmer*.

His crops are always equal, and often better than any in the neighborhood, and are kept clear of weeds.

He watches the markets, and sells his crops at the highest prices.

He makes it a rule always to spend a little less than he makes.

Himself and wife are both industrious, the children are brought up in the same way, and are not allowed to shoot the birds, smoke cigars or chew tobacco.

He buys and sells on the cash principle, and thus saves himself from losses and bad debts.

He has a large fruit orchard, well supplied with every variety of fruit to ripen in succession.

He studies the *theory* as well as the practice of farming, has cleared off the last $100 of mortgage, and is seriously talking of making a bid for his neighbor Sloven's farm, which is up at Sheriffs sale.

He goes to church on the Sabbath, minds his religious duties, and brings up his children to do the same, lives respected, and dies regretted, as a useful man and good Christian.

For the New England Farmer.

THE SEASON.

MR. EDITOR:—The season in this section of the State, if, indeed, it be not even so throughout New England, is cold and backward almost beyond precedent; the mountains of "Old Cheshire" are still habited in their garb of pure white. The cold winds whistle among the leafless trees, under which lie the snow and ice piled in wild confusion. The snow has mostly disappeared in the vales, and in sunny locations, but the hills and mountains are still clothed in white. There are but faint signs of returning vegetation, even in pleasant places; Jack Frost still holds sway over all the vegetable kingdom. Winter grain has suffered severely from the intense cold of spring, and according to present appearances the crop must be light—still it may yet revive; the powers of nature are sometimes healing, and the mild breath of summer, with the "genial shower," may agreeably disappoint the present expectations of farmers in this vicinity. I have noticed a few instances of small fruit trees being slightly injured by unusual accumulations of ice around their trunks. Just above the ground where the trees stood in an unfavorable location and were not properly banked up, the ice formed by continual thaws during the winter, and followed by immediate freezing, and this process continued late into spring, and thus by compression on the outer bark of the tree causing it to peel off. All such trees may be saved by immediately applying any adhesive plaster to the exfoliated part, so as to protect it from the action of the elements. Last but not least, the spring birds came as usual, in quite a merry mood, but I regret to say, met with a "cold reception" from the elements; a violent northeaster soon dispersed them, and I fear many have perished—some have however returned, and are to-day "discoursing sweet music" from the tree-tops to all those who are favored with the ear.

West Keene, N.H., April 22, 1854. H. B.

REMARKS.—The blue-birds in this vicinity were nearly all dispersed or destroyed in the severe storm which occurred here on Saturday, the 15th, and Monday the 17th of April.

STATEMENT OF JOHN H. ROBINSON.

GENTLEMEN:—Herewith I send a statement of the yield of milk from six of my cows for the year beginning September 20th, 1852, ending September 20th, 1853.

I have selected from my stock such as I intended to keep the entire year; not, however, so much with reference to their milking properties at any given time within the year, as with the view of ascertaining precisely the average yield per day, through the year, of what may be considered good, fair milkers.

Two of them calved in September, 1852; two in December, and two in January, 1853; so that it will be seen that four of them have been in milk only for eight or nine months in the year.

The whole yield has been 16,653 gals., making an average for each cow per day of 7 quarts, 1 pint, 1 gill. The greatest average of any one of the six has been 9 quarts, 1 pint, per day; and the smallest average 5 quarts, 1 pint; all measured by the Beer Measure, about the 20th day of each month, and a memorandum made by myself of the product of each cow, separately. The milk was delivered for the Boston market at an average price of 14 cents per gal., at the barn, which would amount to $582,82, or $97,13 for each cow.

The feed has been, in the winter, the best of English and salt hay (half of each,) with half a bushel of brewer's grains per day a part of the time, or, instead of grains, half a peck of corn and oil meal soaked in water twelve hours before feeding. In the summer and fall, no grain, but good pasturage, with a plenty of green corn fodder. They have received no better attention than the balance of my stock, all having been fed with the same quantity and in the same way.

My rule is, when feeding from the barn, to have them fed and milked about the same time each day; say hay three times, grain twice, and water three times, the last watering at 8 o'clock in the evening, which I consider very important. In winter my milch cows are kept for the most of the time in the barn, often, in very cold weather, for two weeks together.

The cost of keeping, at the present high price of hay and grain, may, I think, be put down at about $2,25 per week, from November to June, and the rest of the year at 50 cents; making the whole cost for the year about $75 per head.

As such a difference of opinion prevails as to the average yield of milk from a stock of cows, I have ventured to present somewhat at length the

particulars herewith submitted, and if in the opinion of the Committee they are considered of any importance, they may be disposed of in such way as is judged best. Very respectfully,

JOHN H. ROBINSON.

Dorchester, Sept. 21, 1853.

Trans. Norfolk Ag. Society.

For the New England Farmer.

SAVE THE MANURES.

DEAR FARMER:—Although I am not a regular reader of your valuable paper, yet the interest which it advocates has a strong, deep hold on my affections. And though my present business, leads me in an entirely different channel, still I look forward with pleasure to that time when I shall throw aside the cares and perplexities of trade, and become the sole proprietor of a few acres of land, whereon I can carry out a few of the many improvements which are recommended by your valuable journal. I was born and bred a *farmer*, but, like too many of our young men, I thought I should be perfectly happy if I was only a merchant. But after four years experience, I should be glad to leave the noise and confusion of the city behind, and once more follow the plow.

My object in writing these lines, is, to make a few remarks to the farmers of New England, on the folly of wasting the *manure* made in their yards and stables. As ready *money* and good *credit* is the merchant's *capital*, so is *good manure* the farmer's *best* friend and *capital;* which if judiciously applied, will cause the soil to bring forth an 'hundred fold," and amply repay him for any extra trouble or expense which he may incur.

To the farmers of my native place I would speak plainly but truly.

One-half, and perhaps more, of the farmers of that town have water running in an aqueduct into a trough or cistern in their yards, while few, if any, have a well constructed drain to carry off the surplus water.

In winter, while the manure is frozen hard, it does but little damage if the water runs into, or through the yard; but when spring comes, and the manure is thawed out by rains, or the sun, *then it does do damage*, and much more too, than our farmers are aware of.

When the water collects in the yard, the first thing done by the owner is to cut a ditch through the lowest part of the yard, and allow the water to run off, thereby losing his labor, and wasting his capital.

First. By allowing the water to run through the yard, carrying off nearly all the liquids of the manure. Secondly. When the sun shines warm, the manure being always wet, the farmer loses by evaporation a great part of the *ammonia*, which by the way is the most valuable part.

Now I would ask, if it would not be much better to have a well constructed drain, leading from their cisterns away from their yards? thereby retaining the whole strength of the manure, and do away with one evil at least.

Again. Most of the farmers throw the manure from their stables, where it is left to the action of the frost, rain and sun, until it is frozen, leached and dried, leaving the bulk, but the strength is gone.

Now I ask any candid minded man, if it would not be much better to build a shed, at comparatively small cost, over his stable windows, so as to effectually protect the manure from the action of the elements, and allow it to retain its full strength. Another improvement would be to cart 40 or 50 loads of sand under the shed, and spread it on the stable floor two or three times a week, so as to retain the liquids, and then mix with the manure thrown from the stable. One year's trial will convince the most skeptical. H. STRATTON, JR.

Hartford, 1854.

For the New England Farmer.

BREAKING STEERS.

MR. EDITOR:—Having used many different pairs of oxen, I have many times found the necessity of their being handy, much more so than most oxen are; for it is many times inconvenient, besides being expensive, to have oxen that you cannot use anywhere, without some one to go by the side of them; and sometimes it is necessary that they should be very handy, especially in plowing, and most certainly in plowing in a young orchard, where the trees have been set but a short time. As the saying is, it is hard learning old dogs new tricks, and I think it is something so with old oxen. As there are many old oxen that never have been taught only to gee and go ahead, (unless you are at the side of them the whole of the time) I think it is necessary that there should be more pains taken to have them thoroughly broke, when they are steers, and be taught what it is necessary that they should know, before they get to be six or seven years old. Many people who raise cattle to sell when they are four or five years old, would get much better paid for them if they would thoroughly break them when young, when you can manage them more to your wish. No doubt there is a great difference in cattle about learning and understanding. I would recommend to all persons having steers, not to place too much dependence in their boys, or young and inexperienced hands at the business, for it requires judgment, and a good teamster, to break or handy a pair of steers in first rate order. F. A.

Baldwinville, March 23, 1854.

PLANTING SMALL POTATOES.

We have given no little attention to this subject for many years, and have settled the matter conclusively in our own minds, that it does not pay to plant small seed. For fifteen years we planted the same nameless variety, on the same soil, and at the end of that time found no deterioration in the quality or yield, but rather an improvement. We have invariably thrown out from our seed all potatoes less in size than a hen's egg, and also rejected those overgrown, pithy, or irregular shaped.

In some favorable seasons, and on particular soils, those purchasing and planting the small potatoes which we have rejected, have raised crops equal to or more prolific than our own; but one year with another, we have averaged thirty to fifty per cent. better crops of good potatoes, than our small potato neighbors.

What we have found true in regard to potatoes, we have also, by long practice, proved true in regard to other kinds of seed. Our plumpest and

earliest grains have always been reserved for propagation, and our neighbors can testify that our practice has been attended with good results.—*American Agriculturist.*

THE TWO ARMIES—MUSKETS AND SPADES.

Time-honored customs, that do not possess the inherent elements of substantial utility, must give way before the general improvement among mankind. The practice of keeping costly standing armies, where education and moral influence should form the great safeguard of society, is becoming a matter of less importance now than in the wretched days of feudalism. The following remarks from the *New York Economist*, present a strong contrast between the United States war-army, and one of the peace-armies in our Western States:

The United States army numbers about 10,000 men, and they cost the country last year, $8,525,240 for pay, subsistence, clothing, etc. That is to say, $820 per man, or if we deduct the militia expenses, $200 per man. It would puzzle any one to tell of what service were those men, living uselessly in barracks and old forts, eating three meals per day, and turning out occasionally to touch their caps to their officers.

The Illinois Central Railroad army numbers 10,000 men also, and they receive from the company $3,700,000 per annum, in return for which they labor ten hours per day upon a work, that gradually stretches itself through the most fertile plains, connecting the great lakes with the Ohio and Mississippi rivers, and ultimately with the Gulf of Mexico.

The relative advantages of these two armies to society present an interesting matter for study, and are graphically sketched by the *New York Post*.

The prospective building of the great Central Railroad of Illinois alone, has added to the wealth of that State, in the appropriation of real lands, the sum of forty millions, within a strip of but twelve miles in width, and the actual construction of the road will bring to a ready market millions of acres of land now owned by the general government, which, were the road not constructed, would lay waste for years to come. The Federal government employs ten thousand men at an expense of eight millions of dollars to carry muskets. The Central Railroad Company, employing ten thousand men at less than four millions, confers a vast property on the State, upon the Federal government, and upon thousands of farmers. Year after year the government spends millions of dollars, effecting nothing, and resulting in nothing but the turning loose of superannuated soldiers, made paupers by a life of idleness, to prey upon the industrious the remainder of their existence,

The Illinois Company, by three years expenditures, establishes 700 miles of rails through prolific farms, many of them owned by the persons whom they employed to build the road—men of industry, vigor, wealth and intelligence. The United States, in thirty years, have spent $200,000,000, enough to build a double track to the Pacific, and they have nothing to show for the money but some old forts, guns, tattered uniforms, and demoralized veterans.

AGRICULTURE IN NOVA SCOTIA.

We are under obligations to Mr. BROWN, of the firm of Bessonett & Brown, Halifax, for a printed account of the "Agricultural Exhibition of Nova Scotia" in October last, by which it appears that the occasion was one of great interest—Some 7 to 10,000 persons attended the show, and the stock, grain, vegetables and articles of home manufacture were numerous. The spirit manifested must work out important results in the agricultural operations of the Nova Scotians. The words below are from the "Speaker's Address," whose name is not given. Beside this, however, several excellent speeches were made on the occasion.

Look around upon those tables, and see what Nova Scotia can do to reward the industry of her sons—here are proofs of luxurious vegetation, of which any country might justly be proud; here is a field for generous rivalry which will advance the interests and elevate the character of our common country. Agriculture is no mean or vulgar pursuit—it taxes the highest efforts of the intellect and brings into play all the knowledge which science has revealed to man. Cross the Atlantic, and you will find the farmers of the Mother country not inferior in point of intelligence to any people in the world. There you will find the noblest and most cultivated minds turning from the pursuits of the Statesmen—or law—or physic—and devoting themselves to husbandry; and it is a well known fact that all the American Presidents who have survived the toils and dangers of that eminent station, and many of the other distinguished public men in America have passed the evening of their days in superintending the operations of the plough. In our own country Farming is getting more and more to be a favorite pursuit, and is attracting the regards of men of opulence and leisure.

FARMERS.

Adam was a farmer while yet in Paradise, and after his fall, commanded to earn his bread by the sweat of his brow.

Job, the honest, upright and patient, was a farmer, and his endurance has passed into proverbs.

Socrates was a farmer, and yet wedded to his calling the glory of his immortal philosophy.

St. Luke was a farmer, and divides with Prometheus the honor of subjecting the ox for the use of man.

Cincinnatus was a farmer, and the noblest Roman of them all.

Burns was a farmer, and the Muse found him at the plow, and filled his soul with poetry.

Washington was a farmer, and retired from the highest earthly station to enjoy the quiet of rural life, and present to the world a spectacle of human greatness.

To these names may be added a host of others who sought peace and repose in the cultivation of their mother earth; the enthusiastic Lafayette; the steadfast Pickering, the scholastic Jefferson, the fiery Randolph, all found an Eldorado of consolation from life's cares and troubles, in the green and verdant lawns that surrounded their homesteads.

CLASSIFICATION OF SOILS.

The want of some system of classifying soils has long been felt. The arbitrary terms in common use convey no definite idea of the subject. A writer in the *Farmer's Magazine* recommends a classification based on analysis. We are not prepared to say that this mode is at present practicable, but it is at least worthy of attention. His plan is as follows:

1. *Siliceous soils*, containing from 90 to 95 per cent. of sand. These would be divided, on the same principle, into blowing sand, coarse sand, good agricultural sand, and calcareous sand.

2. *Loamy soils;* 70 to 90 per cent. of sand separable by washing, subdivided into coarse sandy loam, fine sandy loam, rich loam, and calcareous loam.

3. *Clayey soils*, with 40 to 70 per cent. of sand; divided into clay loam, clay, and calcareous clay.

Each of these soils, termed calcareous sand, calcareous loam, &c., contains 5 per cent. of lime.

Marley soils constitute a fourth group, in which the proportion of lime ranges between five and twenty per cent., and are divided into sandy marls, loamy marls, and clayey marls.

Calcareous soils contain more than 20 per cent. of lime. They are divided into sandy calcareous, loamy calcareous, and clayey calcareous. While in calcareous sands, clays, and loams, the proportion of loam does not exceed 5 per cent. The difference of composition denoted by difference of name, is similar to the sulph*ates* and sulph*ites* of chemical nomenclature, which contain different proportions of sulphuric acid.

According to the quantity of pebbly fragments yielded by a square yard, or by a cubic foot of the soil, they may be denominated *gravels*, or *gravelly* sands, loams, and clays.

Vegetable soils vary from the common garden mould, which contains from 5 to 10 per cent. of vegetable matter, to the peaty soil, in which the organic matter is about 60 to 70 per cent. They will be vegetable sands, loams, clays, marls, &c.

Considered geologically, soils may be classed in three groups:

1. *Local* soils, or those derived exclusively from the debris of the rock on which they rest, unmixed with materials of other rocks.

2. *Erratic* soils, containing the unmixed materials of several, and in many cases distinct formations, transported by currents of water which, at the close of what is called the testary period of geologo, acted irrespectively of the present lines of drainage and sea levels.

3. *Alluvial* soils, composed of finely divided matter, transported and deposited by rivers and tidal currents, in subordination to the existing levels and lines of drainage.

American Flax Growing.—The American Linen Company, composed of some of the best business firms in this city, Baltimore, Philadelphia, Boston, Fall River, (their mills are at Fall River,) have issued a circular to all the farmers of America, to encourage them to grow flax, which we copy in another place for the information of our readers. The Company furnish samples with prices affixed and promise to pay those prices for *all* the flax offered within a year; so that the grower has nothing to fear from an over-stocked market.

The American Linen Company has expended over $450,000, and expect to make the sum over half a million, in completing the best establishment in the world for spinning and weaving fine shirtings, sheetings, table linen, and goods for men's wear. They will require two millions of pounds of lint, and hope to manufacture from half to three-fourths of a million of dollars' worth of goods per annum; and they particularly desire to do this from American flax, but at present are unable to procure a supply. It is not grown in the country. Shall this be said another year? Shall it be said that a country of such an unbounded extent of cheap rich soil must import the raw flax for its own manufacturing? There is no time to be lost. Farmers, prepare your ground for flax! —*N. Y. Tribune.*

For the New England Farmer.

TRANSACTIONS OF THE MIDDLESEX CO. AGRICULTURAL SOCIETY,

For the Year 1853.

Although, to use the language of the Chairman of the Committee on milch cows, this society "has gone somewhat over its time," it has now "come in," with a production, full grown and well formed, which will hereafter be referred to as a model for imitation.

The Report on farms, and the statements connected therewith, using, as they do, the right words in the right place, neither more nor less, are well suited to confirm our long-cherished impressions, that this is one of the best modes, in which agricultural societies can operate, to benefit the farmer. Select a committee, who will labor, *con amore*, and go into all the towns of the county, and visit all who will receive them, and it will not be difficult, in any of our towns, to find objects worthy of being reported. It will not do to wait for claimants to come forward of their own motion—for if you do, the chance is, that many objects most worthy will be passed without notice. Real merit does not protrude itself—it needs to be sought out by those who have discrimination to distinguish it, and independence to declare truly what they find.

Having heard much of the "butter products" of this region, we were curious to observe what the "butter committee" would say of the "butter stock" of the County. Their report affirms all that has been said of Mr. Reed's extraordinary Jersey cow. It is worthy of notice, also, that of the *two cows*, to which *first premiums* were awarded for their yield of butter, *four quarts* of the milk of one yielded as much butter as *sixteen quarts* of the milk of the other. This is a difference that would justify experiments, to ascertain the principles on which butter is made. We learn that the Exhibitions by this Society have been permanently located at Concord; and that convenient accommodations have been provided by the generosity of the inhabitants of the place. This will do, so long as the border towns are satisfied therewith; but no movement should be made to lessen the general interest in the operation of the Society, or to provoke inexpedient subdivisions. Having more than once witnessed the Exhibitions, by this file leader of our County Societies, we are pleased to find it going ahead, with all the energy of youth. May its prosperity be perpetual, and

may the young men of other counties emulate the zeal and intelligence of those of Middlesex.

April 24, 1854. ESSEX.

REMARKS.—Residing in Middlesex County as we do, and feeling a deep interest in the prosperity of the Middlesex Society, we cannot help expressing our gratification, and, in the name of the Society, its thanks, for the commendations bestowed upon it by one who has been himself the honored President of the Essex Society for many years, and a gentleman whose interest in the noble cause is not surpassed by any.

A FOX'S REVENGE.

A respectable man of the county of Montgomery resided on the banks of the Hudson river. One day he went to a bay on the river, to shoot ducks or wild geese. When he came to the river, he saw six geese beyond shot. He determined to wait for them to approach the shore. While sitting there, he saw a fox come down to the shore, and stand some time and observe the geese. At length he turned and went into the woods, and came out with a very large bunch of moss in his mouth. He then entered the water very silently, sank himself, and then keeping the moss above the water, himself concealed, he floated among the geese. Suddenly, one of them was drawn under the water, and the fox soon appeared on the shore with the goose on his back. He ascended the bank, and found a hole made by the tearing up of a tree. This hole he cleared; placed in the goose, and covered it with great care, strewing leaves over it. The fox then left; and while he was away the hunter unburied the goose, closed the hole, and resolved to await the issue. In about half an hour the fox returned with another fox in company. They went directly to the place where the goose had been buried, and threw out the earth. The goose could not be found. They stood regarding each other for some time, when suddenly the second fox attacked the other most furiously, as if offended by the trick of his friend. During the battle he shot them both.—*Murray's Creation.*

BLACK WARTS---WHITEWASH.

Black warts on plum trees should be cut out and burned. Should they re-appear, repeat the operation till the evil disappears. But this course is not always effectual. We knew a tobacco chewer to cut out a large wart on a plum tree, and taking the quid from his mouth, warm and juicy, applied it to the wound, and on that spot there was no gathering of the wart afterwards.

WHITEWASH.

Remember that whitewash is one of the finest things in the world to promote cleanliness and health. Old buildings, the coverings of which may not be worth the expense of a coat of paint, and which are so unsightly that you are justly ashamed of them in their present condition, may be made to appear almost like new work by the application of a few coats of whitewash. Fences around the house should be washed or painted, also the interior of all out-buildings, barns, sheds, hen-houses, granaries, &c., and the walls of the cellar, as well as the overhead ceilings of the rooms in the house. A liberal use of this sanitary material is of great consequence; lime being a powerful disinfector, and highly efficacious in promoting health at all seasons of the year. Powdered lime sprinkled over the bottom of the cellar after the roots are removed in the spring, and repeated occasionally through the season till cold weather, will prevent the unpleasant odor ordinarily engendered by warmth, and keep the atmosphere pure and sweet.

SALT AND ASHES FOR SHEEP.

Have a trough in your sheep shed or pasture, and keep it well filled with a mixture of salt and ashes—one part of the former to three of the latter.

CHARCOAL FOR SWINE.

Throw to your swine, occasionally, a handful of charcoal. Breeding sows, and those with litters of pigs, will not only eat a little charcoal, but like old bones, and will sometimes eat a bit of lime mortar as large as a hen's egg—they should, therefore, come to the ground every day.

For the New England Farmer.

SHALL I ENGAGE IN FARMING?

MR. BROWN:—Dear Sir,—Being a subscriber and a constant reader of your valuable paper, and noticing that you are always willing to answer the many questions which are proposed to you, I would like to inquire through the columns of your paper, if a young man, with a small capital, of say eight or ten hundred dollars, may advantageously engage in farming in Massachusetts? and in what part of the State could he best locate, taking all things into consideration? If you, Mr. Editor, or some of your correspondents, some of the old experienced farmers of the State, whose names we often see in the Farmer, would give this subject a little attention, and impart a little good advice on this subject, you will no doubt oblige many others beside myself. B.

For the New England Farmer.

WHY DO CATTLE EAT THE HORSE MANURE?

MR. EDITOR:—I wish to make some inquiry through the columns of your paper, in regard to cattle eating horse manure. Some of my cattle seem to have a ravenous appetite for it, as it is thrown into the barn cellar. I should think they would eat more than one half of it.

Is it a natural appetite, or do they eat it in place of something else which they *ought* to have? Is there anything lost in the way of manure, or is there something gained in the way of keeping? If there is a loss, what is the remedy? D. A.

Wilton, April 3, 1854.

For the New England Farmer.

GUANO—PRIVATE CORRESPONDENCE.

———, *N. H*, *April* 28, 1854.

HENRY F. FRENCH, ESQ.:—My Dear Sir,—I have bought some *guano;* what shall I do with it, and *how* shall I do it? I want to try the experiment up here in the country, as I suppose its principal use is as a sort of genteel city fertilizer, and not adapted to the rural regions. I want to try it, on some corn, potatoes, squashes, cucumbers, &c., and I know no more about it, than I do of the Sancrit language, and as you are *au fait* in the matter, just develop your resources, for the benefit of your race, and tell me how to make two ears of corn grow, where three would grow without it. * * *

Yours truly, R. M.

Exeter, N. H., May 1, 1854.

MY DEAR SIR:—I am much at a loss how to reply to yours of the 28th ultimo. My last conversation with you on the subject of Agriculture, was, I think, in 1852, when you were a member of the New Hampshire Legislature, and I, as a private individual, was urging the propriety of some action by your august body, in aid of the cause, either by the appointment of a Commissioner, the creation of a Board of Agriculture, or by pecuniary assistance to the Societies.

Your views, at that time, coincided with those which have prevailed for some years among the farmers, who constitute always a majority in the Legislature of this agricultural State. You verily believed, that scientific farming is a humbug; that while in all other pursuits, advances have been constantly made, and men have been greatly benefited by diligent research, by comparing results, by making known the success and failure of their experiments, by meetings for discussion, by exhibitions of their products, by understanding accurately the nature of the substances upon which they labor—you verily believed that a farmer's father and grandfather are the only valuable authorities, and that "the traditions of the elders" are of more weight, than all the laws of nature, and all the attainments of science. In short, you seemed to believe, with Dogberry, that "to be a well favored man is the gift of fortune," but that *to farm*, as well as "to read and write, comes by nature."

And thus by the countenance, which educated men like yourself, who ought to know better, have given to the prejudices of ignorant men, against the value of accurate knowledge, in this most important department, our good old Granite State, which stood foremost in the day of battle for the defence of the soil, and which has done gloriously for the cause of education in her common schools, has fallen far behind her sister States in her zeal for the promotion of this branch of knowledge and while Massachusetts and New York and Maine, and nearly all the other States, are appropriating money liberally for this object, we have neither a Commissioner nor Board of Agriculture; and not one cent is contributed to aid the County Societies, in their desperate struggle with poverty, for existence.

But now you begin to inquire, what you shall do with guano. Adam and Cain knew nothing about the Chincha Islands, and our great grandfathers, consequently, left no traditions on that subject, and you really feel as if something may be *learnt*, even about farming. I remember an anecdote about a farmer, who had a lawsuit, and was told by his lawyer that he had filed a demurrer in his case. "A demurrer," said the farmer, "pray tell me, Squire, what sort of a thing that is?" It was hopeless to attempt an explanation of a matter so abstruse, and the lawyer would not attempt it. "Go home," said he, "my good fellow, and hoe your corn and potatoes, and feed your cattle; the Almighty never intended you should understand what a demurrer is."

Now, my dear sir, I have no doubt that *you* know exactly what a demurrer is, but I have serious doubts whether it was ever designed that you should know anything about *guano*, or anything else connected with agriculture. If it had been, you would not in this last half of this enlightened nineteenth century, be left in such heathenish darkness, as to imagine that anybody could in a single letter, give you the information you desire.

Not long ago, I received a letter requesting me just to take the trouble to inform the writer the best mode of planting, rearing, pruning and cultivating an orchard; and another from a stranger, who said he had accepted an invitation to deliver an address before an agricultural society, and as I was in the way of writing on such topics, requested me to suggest to him a subject and a plan for his discourse, and such remarks as might be proper. I have not had time to answer these letters yet, and it would be a still greater task, to undertake the education of a grown up pupil, on the subject of guano. My advice to you, is, however, to commence with the last five volumes of the *New England Farmer* and read all the articles therein contained, on the subject. You will find no less than *ten* in the volume for 1853. Then read what you find in the *Granite Farmer and Visitor* for the past two years.

But you ought to be more thorough than this, and make yourself acquainted, not only with the constituent elements of guano, but of the plants into the coustitution of which, you intend it shall enter. Johnston's Elements of Agricultural Chemistry and Geology, is a capital work for you, and Browne's American Muck Book contains a chapter of twelve pages on Guano, which you ought to read and understand before you use an ounce. You would do well, also, to review Stockhardt's Principles of Chemistry, which you probably studied in college without understanding what it meant.

You will, also, find in the appendix to the American edition of Johnston's Agricultural Chemistry, some very interesting experiments with guano on the various kinds of crops.

Were you one of that class of the community, who believe that there is some advantage in *knowing how* to conduct farming operations, who read agricultural papers regularly, who are members of an Agricultural Society, and a Farmer's Club, and so learn what the rest of the world discovered long ago, it would hardly be necessary to refer you to so many books; but your inquiries make it quite certain that like the good lady who visited the White Mountains, and forgot to look at the scenery, you have spent your life in a country full of this kind of knowledge, without thinking to acquire it.

Allow me, my friend, a word or two more in conclusion. Should you pursue your present

idea of experimenting with guano, and find that from your ignorance of its properties and the true modes of using it, your corn never sprouts, and your potatoes do not come up till dog days, I pray you do not publish your testimony that guano and scientific agriculture have both proved humbugs, just as you expected. I read of a man once, who was advised to try salt as a manure, and he did try it, and wrote his opinion for publication in an agricultural paper. He said he was satisfied that salt did more hurt than good; that he put a *half pint* into each hill of potatoes, and half of them never grew at all, and those that did grow came to nothing.

Another man, who tried guano on his cucumbers, said that on applying it one morning to some hills already up, the vines grew so fast that he was obliged to run to get out of their way, but they kept up with him and twined round his legs so as to stop him. He then put his hand into his pocket for his jack-knife, with which to cut loose from them, and found there a cucumber gone to seed! Now, if you expect your cucumbers and squashes to grow at that rate, you will *probably* be disappointed.

Excuse me if I have herein addressed you as a person somewhat unlearned in the mysteries of Agriculture. It is manifest from the fact that you do not state in your letter what *kind* of guano you have procured, that you do not know the difference between the Peruvian and Saldanher Bay guano, although the first contains about 17 per cent of ammonia, and the latter about 1½ per cent., while the latter contains more than twice as much of the phosphates as the former, so that they are about as much alike as salt and salt petre.

I am glad to see that you are beginning to take an interest in this subject. If at any time I can be of *further* service to you in the "pursuit of knowledge under difficulties," I hope you will not hesitate to command my services.

With sentiments of the highest consideration, yours truly, HENRY F. FRENCH.

R. M., Esq.

STORING APPLES IN DRY SAWDUST.—I have a dark closet in my house, or rather I live in a row with windows back and front. The house is four stories high, and the length from front to back is so great, that we have three rooms on the floor, the centre dark. On the third story the floors are plaster, and I find the temperature so even that I use it for a wine-store in preference to the cellar, and have it fitted with bins. In this room I put some hampers of apples (like pearmains.) I wanted one of the hampers and turned the apples in one of the binns, amongst the dry sawdust (pine sawdust.) A fortnight ago we looked at them, having used up the others gathered at the same time, and from the same tree, all of which were much wrinkled, but on taking those off and from among the sawdust, I found them in a most beautiful condition; those covered with sawdust were as plump and fresh as when gathered; while those partially buried were only so to the extent covered with the sawdust, the upper portions being wrinkled. I am so pleased with the discovery, that I shall pack them in binns next year, for I have no doubt they will keep in this way till next Christmas.—*Ayr (Scotland) Advertiser.*

For the New England Farmer.

NORTHERN FARMING.

The following brief account of farming on the "Line" was written at my request, and submitted to me, with the privilege of offering it for publication, "entirely on my own responsibility." It is at your service, Mr. Editor, if you think, with me, that many readers of the *Farmer* will be glad to know how people live where corn ripens once in four years, or so, where apples will not grow, and where a snug little frost every month in the year is no uncommon occurrence. My brothers object to the publication of their statement, on the grounds that some of their neighbors are better farmers than themselves; that they have no big stories to tell—nothing to brag of, at all; that, beginning the world entirely empty-handed, they have not even "got a-going" yet; and that by putting themselves or their farm "into the papers," they shall exhibit more vanity than good sense. They consent to its publication, therefore, only on condition that the editor and myself will step in between them and the force of these objections.

Yours, &c., S. F.

Winchester, May, 1854.

Situated in the northeast corner of Vermont, about one-half mile west of Connecticut river, and extending almost to Canada line, our farm consists of two hundred and seventy-five acres; one hundred acres enclosed as a mowing field, of which ten to fifteen are cultivated yearly; one hundred acres pasturing, and the remainder woodland, on which are twelve to fourteen hundred maple trees suitable for "tapping," and plenty of good spruce and hemlock for building, fencing, &c. We purchased in 1849, and it was then considered to be in a good state of cultivation, for this section, as a stock farm.

The amount of hay cut in 1848 was about 70 tons; in 1843, 90 tons. Of grain we raised in 1852, oats 600 bushels, buckwheat 200; in 1853, oats 250, buckwheat 200 bushels. Of roots—last year (1852) potatoes 200 bushels, (badly rotted) turnips 200; in 1853 about as many potatoes, (a very light crop,) and 300 bushels ruta-bagas on one-half acre. Have measured and fed turnips and buckwheat, and we estimate turnips worth 12½, when buckwheat sells at 40 to 42 cents, and oats at 30 cents per bushel, for feeding raw to shoats, but think the best way we can feed turnips is to cattle in winter with hay—say to cows, oxen, and calves; calves we think pay best for turnips. Fall before last we cooked turnips, but could not see much advantage in it.

The great object of our cultivation here is the production of grass. For this purpose we think the best course is to keep land in tillage only one year. Spread on manure, 30 to 40 loads, (of 35 bushels,) and turn over the sward in the spring, with a furrow seven inches deep, harrow *thoroughly*, sowing the grain after it is partly harrowed; then bush it over, after which grass seed is sown, and rolled, which sufficiently covers the seed, and leaves a smooth surface for the scythe. For potatoes, land thus prepared is furrowed, the seed dropped, and covered by a light furrow turned upon the potatoes from each side of the row; cultivated twice, with very little hoeing, as few weeds start up by this process, and we find hand-hoeing

laborious and expensive. But our springs here are so short that we cannot do it all in this way. So we plow some in the fall, spread the manure on the furrows in the spring, and harrow it in. Find that manure used in this way makes the first crop better than when plowed under, but does not sustain grass as long. By cultivating only one year, and plowing under the manure we get good crops of hay from five to ten years, while oats in two or three years would exhaust the manure and soil too. The land we plant is seeded down the second year. As plenty of clover grows from seed in soil or manure, we generally sow only herdsgrass. We use but little manure as top-dressing to grass land, believing it more economical to plow it in.

We compost manure by carting into the yards one hundred or more loads of muck. Although we have no swamp or bog-meadow, we consider ourselves fortunate in the possession of the best beds of muck we were ever acquainted with. About one hundred acres of our farm is what is known in Vermont as "*intervale*"—lying on Leach Stream, near its junction with the Connecticut river, fifty acres of which are annually overflowed in the spring, by the melting of the great body of snow that accumulates on the hills, which are still covered by primitive forests, and frequently in the fall also. In the depressions of this low land we find valuable materials for manure. The "bed" from which we are now supplied is nearly circular, some five rods in diameter, and ten feet deep in the centre. It is composed apparently of vegetable matter entirely, no sand or grit being perceptible. The beneficial effect of this muck, plowed in just as it came from the bed, has been distinctly perceptible after twelve successive mowings. Our neighbors, who can purchase manure at the village, one mile distant, for one dollar a load, are willing to pay us twenty-five cents a load for our muck, and say they can make manure with it faster and cheaper than by purchasing and drawing. In the fall we will put into one of our yards, say, one hundred loads of muck; during the winter twenty head of cattle are yarded upon it, but seldom fed there, and in cold weather are out of the barn but a short time each day; during the summer twelve cows are kept in the yard nights, and in the fall, one year from the time it was put in, and with no additions except the droppings of the cattle, we have a compost which is worth more for crops than stable manure.

Our stock, this winter, consist of seventeen three-years old steers, twelve cows, four oxen, and three horses. Sold one cow a few days since for $52, and reserve her calf. We give our cattle a "fodder-ing" in the morning before light; when that is licked up they are turned into the yards, and the stables cleaned; after they have drank and aired themselves the cattle are put into the barn and fed. Just before night they are again let out, and the stables cleaned for the night. They are fed in the evening. Stock, especially young cattle, require more care here than in milder climates. We have some days every winter when it is not safe to leave our calves in the yard for an hour, if we would not have their feet and horns frost bitten. This year we have some twelve or fourteen tons of hay more than our stock will consume. Hay is worth ten dollars, which is high for this place.

We employ both oxen and horses; prefer oxen for hauling manure, wood and hay, horses and oxen for breaking-up, and horses for raking hay and most other kinds of work.

We make butter and cheese for our own families, and $150 to $200 worth for sale. Find it quite profitable to raise pork at present prices.

For fencing, we consider boards with cedar posts, which are plenty here, the cheapest.

Our only orchards are maple trees. Last spring we made something over 2000 lbs. of sugar. For samples of which, the Massachusetts Charitable Mechanic Association awarded us a diploma, last fall, and the Editor of the *Farmer* a handsome "acknowledgment." As this "harvest" occurs in a comparatively leisure season of the year, we regard it as the most profitable branch of our business, in favorable seasons. We commence about the first of April, with the snow often three feet deep (by measure, not guess) and end the first of May, when the snow is pretty much gone. Back a short distance from the River, much sugar is made in May, in which month snow-shoes are sometimes used in gathering sap.

Although apples and many other kinds of fruit do not succeed well here, and corn will not ripen so as to make good yellow meal oftener than about one year in four, yet we have currants, raspberries, &c. in profusion, and a growth of oats, buckwheat and potatoes perhaps not equalled in New England. Good farmers here raise from seventy-five to one hundred bushels of oats per acre, from 20 to 40 of buckwheat, and before the prevalence of the disease, from 300 to 500 bushels of potatoes were frequently raised on our intervales. We esteem oat straw as valuable feed for stock. It grows here as high as a man's shoulders. By sowing from 4 to 6 bushels per acre, we get a fine straw that is readily consumed by cattle, especially if the grain is cut early and the threshing is not done too carefully. Last winter, from December 10, to February 15, we kept thirty-eight yearlings entirely on oat straw, and although they might not appear quite as plump as though fed on hay, we thought they did rather better in the summer than hay-fed yearlings generally do. Perhaps the straw, or the grain in it, may be more favorable to the growth of bone, than hay is.

A few years ago the farmers of this section were far from market—in fact, very much "out of the world." But now the railroads have, for all practical purposes, brought the Brighton and Faneuil Hall markets up to "Canada Line,"—and greatly increased the value of all we have to sell, as well as of that of the land on which it is raised.

SUMNER FLETCHER,
THOS. S. FLETCHER.

Canaan, Vt., April, 1854.

IRRIGATION OF GARDENS.

From repeated experiments we are induced to draw the conclusion that next to manure, the great prime mover in successful culture, there is nothing more important to vegetable growth in many cases than irrigation. Practical gardners regard it as indispensable, and a large share of their success depends on copious watering.

Some interesting instances, which have recently occurred, may be worth stating. Two rows of raspberries stand on ground in every respect alike, except that one receives the drippings from a

wood-house, and the other does not. The watered row is fully four times as large in growth as the other. Again—the berries on the bushes of a Fastolph and Franconia raspberries were, at least twice as large when the soil was kept moistened, as afterwards when allowed to become dry; a repetition of the watering again doubled their size. Again—a near neighbor, who cultivates strawberries for market, and uses a water cart for irrigating the rows, raised at the rate of one hundred and twenty bushels to the acre, on common good soil by this means; and he noticed that where the cart was left standing over night, so that the water gradually dripped from it, for some hours, upon a portion of the plants, the fruit had grown to double the size of the rest in twenty-four hours. It should be observed that these advantages of a copious supply of water pertain chiefly to small or annual plants. The roots of fruit trees, being larger and deeper, are to be supplied with moisture in a different way; that is, by a deep, rich, mellow soil, kept moist by cultivation, or by covering thickly with litter. Water applied to the surface rarely descends so low as the roots, and only hardens the soil to a crust.—*Albany Cultivator.*

For the New England Farmer.

WHAT A GARDEN SHOULD BE.

At the end of the first article upon the garden, it was expected that the next would consider the flower garden in its beauties and varieties, but it has been neglected until now. As the warm spring hastens its steps, and the golden summer re-approaches our cold hills and valleys, the love for flowers revives; when the sap first starts, and the buds swell, even the dullest laborer gladly greets the saxifrage and violet, whilst the refined welcome them with an enthusiasm, not again awakened by any after-comers of the floral year; but, happily enough, each season has its own set of pleasures, and human sympathies, and as month succeeds month, new interests arise, till the yellow and rosy harvest; then the cold winter blasts, once more drive back into mother earth each loitering straggler of the spring's darlings.

We have seen that varied gardens have marked the world's progress, but they have ever been the peculiar luxuries of the rich and great. Not so with us; in our prosperous country, every prudent man can own a house and plot of land, and may there collect comforts and pleasures unknown to his equals in another hemisphere;—whilst the day laborer has his little corner, the more prosperous mechanic and merchant have their acres. With the land comes the question, how may it be best used? If the income is small, it is, how it may be made most conducive to the welfare of the family; and the question is generally answered by the needs or desires of the appetite, and soon fruit trees and vegetables fill the spot.

But even amongst these, there is room for a few of nature's favorites; do not judge of the worth of the possession by its monied value, and how far it will fill the purse, or gratify the passions.

Man has a higher aim than merely to live; he has a future, and must develope himself now, so as to take such a position then as he may have a right to.

There is no more sure method of ennobling the mind, than the contemplation of something higher than ourselves, than to be not of the earth, earthy. Let us surround our families with mere utility, and they must become utilitarians; if we would make a boy close and avaricious, or their opposites, we cultivate those qualities in youth; if we would unfold his higher nature, we can only do it by offering it every inducement to manifest itself. But to leave the ethics of the subject, and come directly to the thing before us, the plot of ground, what is the first thing to be done after its acquisition? Ascertain how much land you can afford to keep free from weeds. Remember, we ought not judge a man's gardening qualities, *by the amount of land he tills, but how well he cultivates;* better quarter of an acre full of fruit and flowers, than half, where every other plant is a weed. Having decided how much land is to be kept in culture, lay the rest down to grass; then from the piece selected, allot a certain amount to flowers, but do not think any gravelly knoll or corner will answer; you cultivate them for their beauty, *and nothing is more dependent for perfection, on generous nurture;* the common mistake is, in making a flower garden, a compound of gravel walks, flower beds, and turf edging.

Abandon the idea of a *flower garden*, and substitute *flower beds;* the common method is to lay off the land into a square, or some other regular figure, and then subdivide that into ovals, circles, triangles, &c., entirely forgetting that walks fill with rubbish and must be as carefully cleaned as the beds themselves; and that the effect of mathematical divisions and sections is necessarily stiff and formal, and in every way alien to the natural beauty and grace of flowers and plants. To economise labor, if nothing else, avoid extra paths; get the flower garden surface into a thick, rich turf; dig deep, and manure well, that the grass may never suffer from drought, and then you will soon have a beautiful emerald setting for your jewels. In this turf cut out such figures as please your fancy, the more irregular the better; here arises a difficulty; the roots of the grass are ever liable to grow into the beds, and choke the flowers; to prevent this, drive down strips of slate, bricks, or even cedar poles, around the perimeter of the bed, driving them down flush with the surface, in order that the grass may cover them over, they will present an effective barrier to all vagrant roots. Next remember that the best way of avoiding weeds in the beds, like vices in the mind, is to cultivate flowers or virtues; cover the ground with them so closely, that the weeds shall have no chance.

After the beds are ready, 1st, select plants of about uniform heights to fill them, so that none shall overshadow the others, or if some must grow higher, let them be in the centre or at the back, and grade down from them with more dwarf varieties. 2nd, select according to the season—have bulbs for the spring, and perennials and bedding out plants for the summer and fall. Get all the best varieties of perennials, and next biennials, as they save the trouble of refilling the beds every year; but you may want something else for filling; to supply this want, plant the seeds of annuals, or better still, get every spring a few Heliotropes, Verbenas, Geraniums, Mexican sage, &c., from the nearest green-house; these latter are universal favorites, because they bloom steadily from the time of planting until frost, and may then be tak-

en up, potted and preserved for another year. 3d, select such a variety of shrubs as will commence blossoming in April or May, and continue till October. 4th, get the very best varieties of Perpetual Roses; far be it from me to decry the charms of the old June Roses, (those that bloom only once in the year) few better appreciate the delicate Maiden's Blush, the Crimson Damask, the Hundred Leaf, or the Provence, but I am forced to prefer the Bourbons, the Hybrid Perpetuals, the Chinas, the Teas and the Noisettes, which like the Orange, give buds, fruits and flowat the same time.

In conclusion, let these be the cardinal points in the formation of a flower garden; *have no more ground than can be kept free of weeds;* plant only such flowers as will keep continually in bloom; set the beds in the grass, and mow it often, so that the flowers may ever be prominent; get the greatest possible variety of flowering shrubs, particularly those that will commence early, and leave off late; the best shrub is that one which has not only flowers, but a fine and lasting foliage, and berries for the birds: have just as many Perpetual Roses as may be, and do not be disheartened because you cannot do all the first year; "little by little the bird builds its nest." Keep your flower beds well filled; bulbs for the spring, perennials or biennials and bedding out plants for the summer and autumn; and be, above all things, careful to keep your flower beds, &c., just as free from weeds, dirt, and disorder, as you would your day-book, for where the garden is neat and beautiful, there happiness and peace will delight to dwell, and bless the inmates of the house.

A list is subjoined of some of the best and cheapest bulbs, roots, shrubs, &c.

R. Morris Copeland.

CHOICE BUT COMMON AND EASILY PROCURED VARIETIES OF BULBS, ROOTS, &c.

NAME.	TIME.	COLOR.
Snowdrops,	March,	White.
Crocus,	April and May,	Varieties.
Daffodil,	" "	Yellow.
Hyacinths,	May,	Varieties.
Jonquil,	"	White.
Tulips,	May and June,	Varieties.
Iris,	" "	Varieties.
Stars of Bethlehem,		White.
Lily, White, Blackberry.		
Tiger, Yellow,	Summer,	Varieties.
Day Lily, (Hemerocallis,)	"	White and Purple.
Solomon's Seal,	May,	"
Gladiolus,	Summer,	Varieties.
Dahlias,	"	"
Ragged Robbin,	May,	Red.
Violets,	"	Varieties.
Valerian,	"	Variegated.
Peonies, dwarf and tree,	June,	Varieties.
Pinks and Carnations,	June, July, August,	"
Pride of the Meadow,	" " "	"
Phlox, dwarf and other varieties.		
Lychnis,	June and July,	Scarlet.
Monkshood,	" "	Varieties.
Campanula,	May and June,	White and Blue.
Lily of the Valley,	May,	White.
Forget-me-not,	June and July,	Blue.
Hollyhocks,	July to October,	Varieties.
Veronica,	May and July,	"
Asters, (native sorts,)	July,	"
American Cowslip,	June and July,	Pink.
Golden Rod,	July to October,	Varieties.
Columbines,	May and July,	"
Vervain,		"
Lythrum,	July and August,	Yellow.
Spiderwort,	June to October,	Blue.
Larkspur,	" "	Varieties.
Ranunculus,	June to August,	Yellow.
Lupine,	June,	Blue.
Chrysanthemum,	September and October,	

BIENNIAL.

Anterhinum,	June to October,	Varieties.
Fox Glove,	June to July,	"
Canterbury Bell,	" "	Blue and White.
Sweet William,	" "	Varieties.

ANNUALS.

Mignionette,	June to Nov.,	Green and White.
Petunias,	" "	Varieties.
Tassel Flower,	June to October,	Scarlet.
Gillyflower,	" "	Varieties.
Pansies,	April to Nov.,	"
Amaranths,	Aug. to Sept.,	White and Red.
Asters,	Aug., Sept. and Oct.	Varieties.
Marigold,	June to Sept.	"
Balsams,	July to Sept.	"

BEDDING OUT PLANTS.

Verbenas,	Mexican Sage,	Lantana,	Fuschia,
Heliotrope,	Scarlet Geranium,	Ageratum.	

PERPETUAL ROSES.

BOURBON.

Souvenir de La Malmaison,
Dupetit Thouars.

CHINA ROSES.

Madame Bosanquet,
Eugene Beauharnais.

NOISETTE ROSES, (*running.*)

Aimee Vibert,
Old Noisette.

HYBRID PERPETUALS.

La Reine,
Duchesse of Sutherland.

TEA ROSES.

Safrano,
Devoniensis.

AYRSHIRE, (*running.*)

Ruga,
Alice Gray.

JUNE ROSES.

Old Red Moss,
Cabbage.

RUNNING ROSES.

Prairie,
Boursault.

SHRUBS.

NAME.	TIME.	COLOR.
Daphne Mezerium,	April,	Red.
Cornelian Cherry,	April and May,	Yellow.
Cornus Florida,	" "	White.
Cydonia Japonica,	May,	Red.
Mahonia, Evergreen,	"	Yellow.
Lilac,	"	Red and White.
Snowball,	"	" "
Azalea,	June and July,	Varieties.
Roses,	" "	"
Flowering Almond,	May,	
Spireas,	May to October,	"
Shrubby Cinquefoil,	June,	Yellow.
Shrubby St. Johnswort,	September,	"
Privet,	June,	White.
Rhododendrons, Ev'g,	June and July,	Varieties.
Laurel, "	" "	"
Clethra,	July and August,	White.
Andromada,	July to September,	"
Althea,	July to September,	"
Thorn (Haw. & Washington)	" "	Varieties.

With the above, or a selection of them, a garden may be kept in continual bloom from March to November.

R. M. C.

CULTIVATION OF THE PEAR TREE.

The principal reasons deduced by the orchardist for neglecting or refusing to plant as many pear trees as will bear some proportion to the number of his apples, and other trees, are that the first cost of the pear tree is generally more than double that of the apple; it is longer in coming into bearing: it is more liable to leaf or sap blight, &c. These objections may look formidable, but they are not insurmountable.

It is true that the cost at the nursery of 100 pear trees, is more than that of 200 apple trees; and this must continue to be so, for the expence of raising pear trees for a suitable size for market is much the greater; but when planted in the orchard they require no more attention than other fruit trees; in order to make them do their best, they require cultivation and attention far beyond what is usually extended to them.

A well cultivated pear tree is as prolific as an apple tree of the same size, and the fruit always sells at more than double the price of apples, so that the cultivator gets full return for his extra outlay for his pear tree.

It may be said that it will not bear transportation

equally well with apples; but it will be recollected that most varieties of pears improve by being gathered before they are quite ripe and allowed to ripen off the tree; if this course is pursued, the objection fails.

A very popular method of cultivating the pear is by working it upon the Angers' quince stock; by this means the tree is dwarfed and thrown into bearing at an early age.

Some varieties succeed better on the quince than on the pear stock, while others refuse to grow upon the quince unless they are double worked; that is first work a free growing variety upon the quince, then the refractory one upon the free growing pear.

Many persons appear to mistake the term "Dwarf Pear," thinking small fruit is what is meant. It it is not the fruit, but the tree that is dwarf.

The best stock for dwarfing the pear is the Angers' quince. The apple is made dwarf by being worked upon the Paradise stock; and cherry upon the Cerasus Mahaleb.

For the orchard we prefer to grow the pear on its own stock, but for gardens and small enclosures we would select the best varieties that are known to succeed well upon the quince, and grow them as dwarfs.

Varieties of the pear that are late in producing fruit when worked on pear stocks, may be brought into early bearing by judicious pruning and pinching.

If the tree is permitted to branch, say three feet from the ground, and pruned into a pyramid form, leaving the lower branches the longest, and cutting back those above, it will not only bring the tree into a handsome shape, but the pruning that it gets to keep it in this shape tends to throw it into bearing. Pinching the ends of the growing branches the last of August or first of September, so as to stop the growth and ripen the wood, will cause the formation of fruit buds.—*Farmers' Companion.*

THE TOMATO.

This vegetable has now become a universal favorite, and is considered wholesome as well as palatable. It is as easily raised as a hill of potatoes, after the plants are two or three inches high—but the seeds being small, they require a little care to get them well started. They flourish on any soil where Indian corn will, and require nothing peculiar in the mode of cultivation. Tomatoes may be prepared in the autumn, as they usually are for the table, then bottled, corked and sealed with sealing wax, and kept through the year. It is not absolutely necessary to go to the expense of tin cans.

In speaking of the tomato, the *Working Farmer* says: this plant requires shortening in for early fruiting. Ninety per cent. of the tomatoes grow within 18 inches of the ground, and ninety per cent. of the vine above that point. As soon as the lower tomatoes are the size of a hen's egg, the smaller ones with the upper part of the plant should be cut off. This will cause the main part of the crop to swell rapidly and produce abundantly, while the portion removed is of no value, as their ripening would have occurred late in the season, and if permitted to remain, would have lessened the amount of the main crop.

* * * Early planting is true of most crops. Great mistakes are sometimes made as to depth. There are very few seeds that benefit by deep planting. Many are very scaly and light, and so feeble that they cannot emerge from the ground if placed below the depth of half an inch. This is particularly true of the carrot. Half an inch seems to be the greatest depth at which the carrot can be planted with certain success as to germination. When planted early they are more likely to germinate readily than when sown later, because the seed is so slow in germinating that the sun is likely to bake it, and in many cases the seeds-man is blamed, when, in fact it is the fault of the cultivator. We find, therefore, that carrots have to be planted early, or quite late, to succeed well, and it is preferable, of course, to plant early.

IMPORTANCE OF ROOTS.

Many consider root culture an absurdity; but the following table, compiled from reliable data, will show the fallacy of such a conclusion, so far, at least, as the nutrimental character of the several products enumerated in the list are concerned. The object is to exhibit the comparative value of the several vegetables, as ascertained by a series of experiments by BOUSSINGAULT. He remarks that in comparing the results of his investigations with the results of the practical *experience* of farmers in feeding cattle, he found a most remarkable coincidence between the theoretical and practical deduction:—

Wheat	1.91
Rye	2.00
Farina of Barley	2.02
" Cabbage	1.48
" Carrots	1.70
" Potatoes	2.25
Potatoes	1,096
Carrots	1,351
Cabbage	1,446
Turnips	2,383

The table from which we take the above, embraces a number of other vegetables, which, however, as they are not and probably never will be cultivated in this country as food, we have deemed proper to omit. The influence of climate, season, manure and mode of cultivation, doubtless has a tendency to vary, considerably, the value of many vegetables. Hence the results of an analysis conducted in France, might not tally, in all respects, with the results of a similar process instituted here, or in England.

But we rely more on the results produced by a careful feeding of roots and the grain to a stock of cattle through the winter, than upon tables so isolated and barren of explanation or accompanying circumstances, as are the above. Boussingault made eight or ten experiments with roots upon several working horses, and came to the conclusion that 100 pounds of timothy hay may be taken, as ascertained by experiment, to be equivalent to

250 pounds of potatoes.
280 pounds of artichokes.
400 pounds of beet.
400 pounds of ruta baga turnip.
400 pounds of carrots.

These equivalents were ascertained in the experiments with the horses, and it appears that where they gained on an equivalent of steamed potatoes of 30.8 lbs. instead of the 11 lbs. of hay, they lost flesh on 38.5 lbs. of carrots instead of the 11 lbs. of hay.

But admitting that it does take 400 lbs. of carrots to be equal in nutritious properties to 100 lbs. of good hay, for the sake of the argument, then let us see whether it is profitable or otherwise to raise them as food for our stock.

On land that has been plowed eight to twelve inches deep, and manured as is usual for our best crops of corn, it is fair to suppose that 800 bushels of carrots shall be produced on an acre as an average crop, which, at 50 lbs. to the bushel, will give twenty tons per acre; then if the 400 lbs. of carrots are equal to 100 lbs. of hay, the 20 tons of carrots will be equal to *five* tons of hay per acre, which we must get in order to equal the carrot crop! The expense of tending the carrot crop would be greater than the usual cost of getting an acre of hay, but not much more than that of cutting, curing and getting in the *five* tons which are required to equal the carrot crop.

There is another important consideration, however, which must not be lost sight of. That the carrots perform an office beyond that of the mere nutriment they may afford, no one who has fed them out and noticed their effect on the animals using them, will doubt. There is no feed that that makes the eye brighter, the skin softer and the hair sleeker, in both cattle and horses, than the carrot. It keeps up the appetite and general condition admirably. Horses, oxen, cows, calves, and sheep are extremely fond of them, and eat them greedily at all times.

In the winter of 1852—3, we fed 7 cows on good English hay, cut and mixed with one quart of oil meal and two quarts of cob-meal, per day, for each cow. In the winter of 1853—4, the same cows, coming in at about the same time, fed on hay cut upon the same ground as that of the previous year, and with the addition of 4 bushels of ruta bagas per day, but not a spoonful of grain of any kind, gave just *double the gallons of milk* that they did fed on the grain! The circumstances under which the cows existed, both winters, were alike, with the exception of temperature—the weather being much the coldest when they gave the most milk. The barn, however, in which they were kept is a very warm one, so that in the coldest weather they were always comfortable.

These facts, therefore, will have more influence in our selection of crops for milch cows, than any tables of the chemists, or any of the popular prejudices against the cultivation of roots. Our climate and soils are suited to the roots which we need in order to enable us to realize ready cash from the sale of hay, and we hope to see this summer a liberal breadth devoted to the root crop.

SPEAK SOOTHING WORDS AND KIND.

Speak soothing words and kind,
Breathe tender tones and dear,
To the afflicted mind,
In sorrow's languid ear,
Help suffering man across
Life's tottering Bridge of Sighs,
Count all things else mere dross,
But gain the heavenly prize.
Speak soothing words and kind.

Wear honor's spotless garb
All through the march of life,
Strike off the poisoned barb
Of envy and of strife;
The true reformer's song
Chant, lark-like, on thy way;
Till night wears out the wrong
And all is perfect day.
Wear honor's spotless garb.

Twine friendship's noblest wreath
Around thy brother's brow,
Who wears his vest beneath
As warm a heart as thou;
The hope, the gem, the star,
The all that life endears,
O! let no trifles mar
The friendship formed for years.
Twine friendship's noblest wreath.

Sow virtue's holy seed
O'er the heart's fallow-ground,
Eradicate each weed
That e'er springs up around;
Spread gospel news about,
Where'er thy feet may roam,
Till all mankind may shout
A joyful harvest home.
Sow virtue's holy seed.

Mark Lane Express.

For the New England Farmer.

HIGH PRICE OF BEEF.

Mr. Brown:—I notice in your paper, in remarking on the Cambridge and Brighton Cattle market, that drovers are paying exorbitant prices for cattle and sheep, and that the butchers are determined not to support them in so doing any longer—it is wisely added, if they can help it.

If these men would come into the country where their good beef is fattened, and learn the high price of the food they consume, also the high price paid for almost every article of food for man, they would admit that they would more likely have to pay higher prices than lower. The farmer that sells his cattle for $7 per cwt. now, do his best, cannot get as much breadstuff as two years ago, when he sold his beef for $5 per cwt.

I live in Stanstead, Canada East, where there are hundreds of head of good oxen ready for market. A few of your cattle buyers have been here where they used to purchase our beef cattle for Boston market; but the result is, they go away, saying the duties are so high that they cannot purchase—the duties being $20 to $40 on a pair of

good oxen. If the cattle dealers would have cheaper beef, let them try to reduce the duties, and Canada will supply your market with good beef at present prices for a time at least.

Yours, W. PIERCE.

Stanstead, March 21st, 1854.

STICK TO THE FARM.

BY HENRY F. FRENCH.

Stick to the farm, young men. Now when land and its products, the true wealth of the nation, are within your control—when corn and wheat, and hay and cattle, and the produce of the dairy, bring double their former prices, while the wages of farm labor, always the last to be affected by fluctuations of business, or political affairs, have advanced comparatively little; now, when the nations of the earth are re-converting their plowshares and pruning hooks into swords and spears, when great armies are gathering together to destroy each other, and lay waste the beautiful earth, which God has given to man to "till and to keep;" now, when the labor of whole countries is diverted from producing the means of feed and clothing and sheltering and blessing mankind, to a worse than idle consumption of the produce of your labor; now while the farmer is rapidly gaining the respect and wealth and influence due to his position as "lord of the land," be not seduced from your honorable and independent place, by whisperings of ambition, urging you to seek for wealth or ease, or honor, in a city life.

You are tempted to exchange the hard work of the farm, to become a clerk in a city shop, to put off your heavy boots and frock, and be a gentleman, behind the counter! You, by birth and education, intended for an upright, independent, manly citizen, to call no man master, and to be no man's servant, would become at first, the errand boy of the shop, to fetch and carry like a spaniel, then the salesman to fill the place which at best, a girl would fill much better—to bow and smile and cringe and flatter—to attend upon the wishes of every painted and padded form of humanity—to humbly suggest to rakes and harlots, as well as to starched and ruffled respectability, what color and fabric best becomes the form and complexion of each—and finally, to become a trader, a worshipper of mammon, as Carlyle says, "a kind of human beaver that has learned the art of ciphering," compelled to look anxiously at the prices current of cotton and railroad stocks, in order to learn each morning, whether you are bankrupt or not, and in the end, to *fail* and compromise with your creditors and your conscience, and sigh for your native hills.

Or, perhaps, your party being in power, you would obtain a clerkship at Washington, and remove your little family from the north, to a more genial climate, to live at your ease, and grow rich on twelve hundred dollars a year! You give up your little farm, your New England privileges of schools and churches, your independent and influential membership of parish, and district and town and church, the woods and play-grounds for your children, your friends and kindred and *home*. Twelve hundred dollars is a large sum to you, half the price of your farm perhaps, twice the amount of the minister's salary. With your habits of economy and thrift, you can live on half the amount. Your arrangements are to be made. The homestead is sold, and you are *landless*. After all, it is not so easy parting with our household gods. The trees our hands have planted take root in our hearts, the vines and roses, twined by our own fingers, and those of our loved ones, over rustic arbors, cling round us more closely than we thought. Your labor has been mingled with the soil of every field. Tears are in the eyes of your wife, at every thought of departing, but she trusts in your superior judgment, and no murmur escapes her lips at your decision.

You have left your home. At the end of a single year in "the city of *magnificent distances*," you have bitter realizations of the meaning of that phrase. It has proved indeed to be full of magnificent distances, for you, from happiness, from independence, from advantages of every kind. For the first time, you have felt how sore a thing it is, for a northern freeman to be dependent, to labor at stated hours, at the bidding of a superior officer, to feel that the office you fill, on which depend your very means of living, for yourself and family, is held at the arbitrary will of another, who may, if he please, make a servile conformity of your views with his own, on political or what you may deem moral questions, the condition, by which you retain your place. You, who at home, had never seen the man who dared claim to be your superior, are forced to submit to the iron rule of caste, to send your card to the Secretary, whom you once knew perhaps as an equal, and wait an hour, with the colored servant in the hall, to be told at last, to call another day—to be slipped over, or shaken off by the "member" whom you helped to elect, and who had now no further use for you; and consume your energies in endeavoring to keep the toe of your boot from proximity with that part of his person, where his honor holds its seat—to be assessed to support party presses, whose principles you may despise. In short, you have sold your manhood for an office, your birthright for a mess of pottage. But the half is not yet told, for the mess of pottage, even, is not sufficient for your wants. Your salary is at starvation point. You must pay two hundred dollars for a house, with two parlors and a basement for servants, without a cellar, without a closet, without a pump or aqueduct, without a sink, or clothes-yard or garden. Your wife with the aid of a servant, cannot do the work so easily as she did it alone, at the north. All the water comes from the city pump, a dozen rods off, in buckets; the slops are poured into the street, your clothing is crammed into wardrobes, your supplies must be procured daily at market, in contemptible quantities—in short, everything, except the parlors, which are for show, and to make you seem respectable, must be richly carpeted and curtained, everything else is adapted to the idea, that labor is degrading, and that the comfort and convenience of those who perform it is not worth consulting. The thrift, and energy and comfort of northern households, is unknown in this latitude.

Look now, at the prices of necessary articles of food. On your farm, however small, your cellar was always filled with an unlimited supply of all such vegetables, as you desired, and barrels of beef and pork of your own slaghtering. Your granary had always as much of corn and rye, and perhaps of wheat, as you chose to use. Your

cows gave you milk and butter in abundance at all times, and your garden and orchard, fruits for yourself and the children, and the neighbors, without stint. Now, (I give actual market prices in Washington) you buy one peck of potatoes for "three levies," or thirty-seven and a half cents, beef at sixteen cents a pound, turkeys at from one dollar and quarter to two dollars each, chickens, with the shells scarcely off their heads, not larger than robins, at twenty-five cents each, butter at thirty-one cents a pound, and milk at eight cents a quart, and so on to the end of the chapter. Instead of enjoying the abundance of the earth, as you have been accustomed to do, you begin to associate the idea of dollars and cents, with the food on your table; you are compelled to vex yourself with economizing in the details of living, instead of by system, and to feel your soul gradually narrowing in, to a conformity with narrow circumstances. You find yourself a poorer man than while upon your hard northern farm, poorer in your animal means of living, poorer in comparison with those around you, poorer in independence, in prospects for the future for yourself and family, poorer in everything.

We might follow this train of thought into further details, did time allow it, but enough, it is hoped, has been said, to induce an independent Northern farmer to hesitate long, and consider well, before he exchanges his position for any place, where any *master* comes between him and his Maker.—*Country Gentleman.*

For the New England Farmer.

PROFITS OF FARMING.

Mr. Editor:—Your correspondent "D. C." may think my answer to his "No. 4" too long delayed; the delay is for want of time only. I did not by my question expect to compel him to use up so much of his time or your paper—as the question is so "extremely indefinite" as "to be no question at all," as "the profits or amount of produce," are so "nearly the same that no argument can be instituted between them," as the question is "logically absurd," and as he nevertheless concluded to waive all objections and answer it, he might have done so with less labor to himself, or less use of your valuable paper. But without running into the same error, I well know, and of course shall admit that the "profits of farming" depend much on the "amount produced," yet they do not entirely; the quality of the products, or the state of the market, has much to do with it. Why is it that New England peaches sell better than New Jersey ones? Is it not because they are better, and if they are not better, because more are raised here then than there? And were not our peaches better than those of New Jersey, we could make nothing comparatively by raising them, and yet this difference secures to the peach growers nearly all their profits.

Again, it sometimes happens that the supply is so much greater than the demand, that nothing or next to nothing is made. Take the same article: I know of many farmers in this vicinity, and I presume your correspondent knows more than *one*, who could not give away their peaches last year, and bushels were fed to the hogs, or rotted on the ground, and bushels more were sold for the lowest prices, just what was offered. So in other things—a few years since, Vermont farmers were all getting rich by raising wool; they enlarged their farms and their flocks, and raised not only more, but more relatively to their acres. What was the consequence? They kept their wool on hand, and the greater the amount of the product the less the profits.

Again, there may be two farmers side by side, and their crops may be equal in amount, and yet one will make much larger profits than the other—he will *sell* so much better, that he will outstrip his neighbor entirely—and no one will deny but that this *selling* is one essential part of farming, or that without a tact at this, a man is no farmer at all.

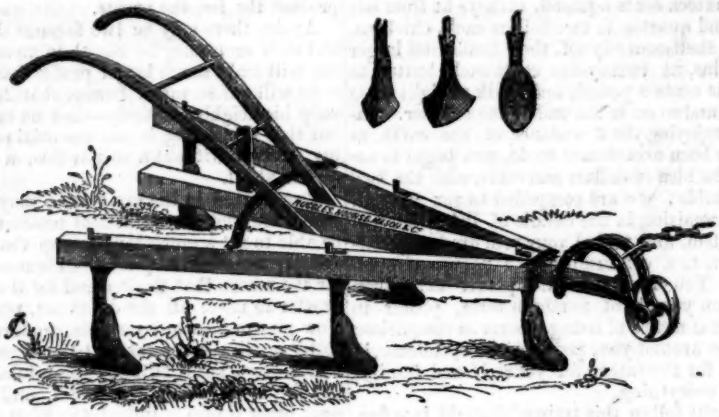
Two farmers in the same town may have farms which are adapted to different products; one may be able to get a much larger crop than the other, and yet the small crop may be the most profitable, for the reason that the demand for that is enough greater to make all the difference, perhaps more. Now we can, in many respects, produce articles of better quality here, than at the West; we raise better corn, pork, butter, cheese, tobacco, fruits, and probably garden vegetables, and it may be some other things. Indeed, the West cannot compete with us in the quality of farm products generally, if they can in any particular; a moderate share of information makes this too obvious for argument—nor also get as high a price. All will admit that we get a higher price for all or nearly all our products. How then can we make as much? I do not mean, nor is that the argument, whether a man here can make as much on one acre, as a Western farmer can on two. It is simply which of the two, taking the whole expenses into account, will have gained the most money.

Now this has been ascertained as nearly, perhaps, as it is possible to do, and you have published the whole thing in 1854, and subsequent information has not, that I have seen, essentially changed this. It will then be seen that the decision of this question is clearly in favor of the New England farmer. In some articles, such as wheat and corn, the Western farmer will receive more, for he will cultivate more acres; the population is sparse there, and he has room to do it; while here, farms are small because the population is dense, and yet some of these small farms have enriched their owners, much more than Western farms; it may not be in corn or wheat, but in other farm products to which the land is adapted, and this is the highest evidence of our abilty to compete with Western farmers; and even in the articles of wheat and corn, there are cases in New England of farmers raising as much per acre as in the West. But your correspondent says he did not mean that we could not compete with farmers at the West under any circumstances and he admits that with certain *helps* we might even exceed them; but does he not see he is in a circle? and that he might as well say at once, that we can compete with, if not exceed them.

I do not think I should have noticed "D. C.'s" article but for two reasons—one is that it was calculated to prejudice our young men against farming, which is the most natural, moral and healthy employment, and when conducted with skill, has proved the most lucrative in the end; another reason is, that it was calculated to discontent men with New England farming. Our citizens have

long been in search of the promised land, and yet nowhere is there such highly cultivated land, and Western men, when here, seem to think, as I have heard them say, that they know nothing about living. There was only one Eden—there is only one New England, and it is not best to permit any spirit to make the dwellers discontented with their homes.

AGRICOLA.



EXPANDING AND REVERSABLE TOOTH CULTIVATOR.

As the season opens upon us, and the land is becoming fit for the plow and other implements used for lightening it, we wish to lay before the reader such improved forms of them as have come to our knowledge, and as we believe will be pleasant and profitable for him to use. The plow and horse-hoe have been already given this spring, and now we introduce the *Expanding and Reversable Tooth Cultivator*. We prefer the Horse-Hoe to any implement of this kind, but some may choose the one repesented above. The expanding implements will become more or less loose and rickety, and are inclined to run out at the sides, making them hard for the person who holds them. The Horse Hoe runs straight, is easily guided, and by running it twice in the row, that is, out and back in the same row, will accomplish more good work than any other implement we have ever used.

The implement figured above is highly approved by some farmers. The points or shares of the teeth are made of steel or cast iron, and are fastened to the shank or standard by bolts and nuts, so that either kind of shares may be used on the same standard, cheaply replaced when worn, and one substituted for the other. The shares being also reversable, are thereby very enduring, as when one end is too much worn to be effective, they may be changed to the other end down, and a double amount of service obtained.

The tooth represented at the left, in the figure of teeth detached, is made of all steel, and known as "Roger's Patent," and may be used, but requires a different mortice; the centre tooth is cast iron, and fits the same mortice as the steel pointed above described. The various teeth are furnished separately.

MULCHING GOOSEBERRIES.

In the August number of the *Western Horticultural Review* we find the following letter from Mr. John N. Brower, of Lawrenceburg, Ind., on the subject of mulching gooseberries:

I beg your acceptance of a small sample of gooseberries from my garden, which, from their fine size and flavor as well as their perfect freedom from rust or mildew, will prove that, by proper cultivation, this delicious fruit may be raised with perfect ease and in the highest perfection. I remember, several years since, while you were visiting us, that you suggested the use of soapsuds or some alcalime wash, as a remedy for the mildew or blast which has so generally affected this fruit, and for the preservation of which many applications had been used but without success. I tried them all, but in vain; scarcely a berry out of hundreds would escape the rust, and many of my bushes dwindled and became worthless.

Some years ago, observing the extremely luxuriant and profuse growth of the off-shoots or suckers, in the early spring and during the fruiting season, which the gooseberry bark put forth, and that the rust never made its appearance until they had attained some size and in such quantity as to abstract a large proportion of the nutriment afforded by the root, an idea, occurred to me that the diseased condition of the bush and fruit was the result, not of moisture, or sun, an insect ravager, or want of adaptation of soil, but simply a lack of nutriment, or, in professional phrase, an atrophy of the plant and fruit, by reason of the large proportion of sap consumed by an useless amount of woody fiber and leaf, and which was necessary for the full and perfect development of the fruit. Acting upon this impression, I pruned very liberally, and throughout the fruiting season leaving no more wood than what bore fruit, and carefully removing all shoots having a light green

color and very rapid growth. My success has been perfect, and whether in the open sun or under shade, I never fail of an abundant crop of fine fruit. My only preparatory cultivation is mulching the bushes with rich compost every winter and spring. The bushes from which these two varieties are plucked I obtained from our friend Elliott. I have lost their names.

THE CULTURE OF ONIONS.

MR. EDITOR:—My success in raising onions, has led many to ask "how it is done." They say the maggot and the large brown worm have been so destructive that they have done trying to raise that valuable vegetable. In answer to such inquiries permit me to reply.

There are at least six kinds of onions. But they are of the same species. The leek, the garlick, the hill-onion, the top onion, the red and the silver onions. From the fact, that whenever onions have been found growing wild, they are always found most plentifully and most flourishing in muck soil, I have taken the hint to prepare my onion bed with a plentiful supply of muck first put into the hog-yard, and then well mixed with common soil. If I plow the ground, I take care not to have the ground too light. As the roots of onions do not go down deep, they will not stand drought so well in light as in more compact soil. Besides onions bottom better where the ground has been rotted or hard trodden.

I cultivate the "top onion" for several reasons. All black seed onions are slow to come up. The weeds get the start of them and then you are obliged to get down on your hands and knees and weed with your fingers. Then warm weather has come on and the maggot fly commences with the young and destroys it. And the black seed onion is so late that the black worm is just in season to bite off the tender stalk, and so devours the onion.

But plant the "top onion" seed, which is already a little onion, you may get them well growing in April. They come up immediately, so that you may hoe them twice or more before weeds appear. And before maggot or worm time, the onion has got the ground by possession. When the weeds appear, you may march right along with your hoe and go over with a bed large enough for twenty bushels, before breakfast.

The reason why maggots have ever destroyed the top onion is, that they were planted too late. They should be planted as soon as the snow and frost disappears. Some put out in the fall and do well. I have never tried it. The top onions on good ground are large as any. They are sweeter and more juicy than other varieties, and can be raised as easy as potatoes.

I have given away and sold seed for several years; and when the experiment has been fair, all have been satisfied. I intend to give away and sell before April, *twelve bushels of seed*. S. MORGAN.

Bristol, Vt., Jan. 13, 1854.

Middlebury Register.

HOW TO TELL THE HEIGHT TO WHICH A COLT WILL ATTAIN WHEN FULL GROWN.—When the foal is three or four weeks old, or as soon as it is perfectly straightened up, measure from the junction of the hoof with the hair, to the middle of the knee-joint, and the number of inches will be the number of hands in height to which the colt will grow. Thus, if the measure is 16 inches, the horse will be 16 hands high. This rule, it is said, will hold good in nine cases out of ten.—*Indiana Farmer.*

HOW TO PLANT CUCUMBERS, MELONS AND SQUASHES,

TO AVOID DESTRUCTION BY BUGS.

As the cost of seed is trifling, we have for the past few years always succeeded in getting good vines by the following process. Instead of planting a few seeds in hills at the distance they would ultimately be required to grow, we have put in a large quantity over the whole ground; so that at first we had a hundred plants where only one was needed. Sometimes we have had a plant come up on every two inches over the whole bed.

As fast as the expanding leaves of the vines *interfere with each other* we cut off the *weaker* ones with a pair of shears, so as not to disturb the roots of those remaining. The "bugs" have always materially assisted in the thinning process, but we have never failed to find twice or thrice the needed number of plants entirely untouched. When beyond the reach of danger from insects, all the weaker plants are removed; and a solitary vine left here and there has been enough to cover the ground.

The same ground will yield much butter, by having the vines at equal distances from each other, than if two or three are left together in the same hill, since the roots have more room to grow, and they find a greater amount of nourishment when thus isolated. The fruit will also be more solid and of better quality.

It should also be remembered that air and light are essential to the growth and maturity of the fruit; and it is better to occasionally cut out a thrifty plant, than that the ground be too densely covered. Just vines enough to thinly cover the ground, will produce better than double this number.—*American Agriculturist.*

For the New England Farmer.

FERTILIZERS.

The preparation and application of manures is the foundation of all successful culture. This is particularly true on the long used fields of New England. Most cultivators direct their attention to the crop of the season, with little or no regard to those which are to follow. In this respect, our modes of culture vary essentially from the modes best approved in Europe, where the aim is, while one crop is growing, to have the land made better, for that which is to follow.

Without the application of fertilizing materials, in some form or other, it is in vain to expect abundant crops. Plow and pulverize as much as you may, it will not grow the plants, without some additional stimulant. The question then is, how shall these stimulants be obtained in quantities sufficient to give fertility to the entire farm.

Look about among the farms, and their products will be found very nearly proportioned to the manures used thereon. And when the manure is itself the product of the farm, either by saving, composting, or otherwise, then it is the mainspring of profit in the farming operations. Con-

sequently he that best succeeds in preparing manures, is most likely to be the most successful farmer.

In farming, like all other pursuits, there are always those who are seeking some shorter road to the point of destination. For this purpose, many kinds of condensed fertilizers have recently been introduced—and often with results most striking. We have heard of many such by the application of *guano*. But whether this can be brought within the command of farmers of small means, we are not distinctly advised. That it frequently operates well, on the crop of the present season, there can be no doubt; but whether it will *need* to be, or *bear* to be repeated year after year, remains to be demonstrated. So with many of the chemical combinations of substances now in the market. Many of these contain the power of giving a vigorous start to growing plants, but what will be their lasting operation upon the soil, remains to be seen. The effects of a liberal dressing of well prepared manure from the stable or barn-yard, are seen for years, and can be calculated on for a certainty. If such be the fact, in relation to the improved fertilizers, it is important to be known. That it is not, I am not prepared to say;—that it is, I have not seen anywhere distinctly shown. On this point instruction is much needed.

GREEN CROPS FOR BARN USE IN SUMMER.

It is the great number of cattle that a British farmer keeps on his farm, which by furnishing so much good manure, enables him to raise such good crops. The turnip crop, occupying one-fourth his farm, furnishes him the grand means of keeping so large a stock during the winter months; and the practice of soiling his horses and cattle, enables him to keep more animals than he otherwise could during summer.

By soiling, is meant the system of feeding cattle in sheds and stables on green food grown for the purpose, instead of allowing them to graze the fields at pleasure. That more food can in this way be obtained per acre, few will question. That we can adopt soiling, except in some few cases near large cities, admits of some doubt. One of the great objections to the practice is the greater amount of labor required in mowing and carrying to the barn the green food, than in letting the cattle cut it themselves. Another objection is that our climate is not so well adapted for the production of succulent summer food as the cool moist climate of the British isles. Yet, as we have often said, we obtain heavier crops of red clover than do British farmers, and red clover is there considered one of the best crops for soiling purposes; and could it be grown with as *much certainty* and in such quantity as in Western New York, it would be much more extensively used.

We believe it would pay every farmer to take an acre or two of clover, as contiguous to the barn as possible, and manure it highly in the fall or spring. It would be found of great advantage to cut and feed to the horses in the stable at noon, and for an hour or so before turning them into the field in the evening. A few acres so manured and *cut early*, would afterwards yield a splendid crop of clover seed; or it might be mown twice, as green food for the horses and cattle.

Indian corn is perhaps the best food that we can grow for green food in summer. It stands drought better than any other crop; and if the soil be rich, an immense amount of nutritious food can be obtained per acre—certainly more than from any other summer crop. For this crop the soil should be either naturally very rich or be well manured. Let it be prepared as you would your other corn land. The deeper it is plowed, and the mellower it is made, the better. *Four bushels* of seed should be sown broadcast per acre, as soon after corn planting as possible. If the soil is moist and in good, fine order, soak the seed corn for twenty-four hours previous to sowing. In this way it will be up in two or three days, and will get the start of the weeds; and if the corn is sown thick, and grows well, it will smother them all, and leave the land in good condition for the following wheat crop. Perhaps, however, it would be best to sow the corn in rows twelve or fifteen inches apart, and hoe it once or twice; the corn would grow more rapidly, and the soil would be cleaner.

Lucerne answers well for soiling purposes, but its cultivation is attended with considerable labor in keeping the soil free from weeds. It is a perennial plant, and does not reach its full growth till the third year. On a rich, sandy loam, well underdrained, plowed, and subsoiled, immense crops of lucerne can be grown. Guano is a splendid manure for this crop, and possesses the advantage of being free from weeds. Lucerne is sown early in spring, in rows from one to two feet apart; eight or ten pounds of seed per acre. It must be frequently hoed and kept free from weeds, and should be cut but once the first year; in after years it will afford three or four crops in a season.

Remarks.—This article, from the *Genesee Farmer*, calls attention to a subject of considerable importance to us at this season of the year. In most parts of New England the drought has been severe for three seasons in succession, and the cattle have suffered much for want of grass. Many of the pastures are too rocky to be worked and the feed on them, therefore cannot be increased much by any means that we are at present aware of, beyond what they have heretofore afforded. The deficiency must be made up in some other way, and we know of none so easy and cheap as the cultivation of the southern flat corn. We would recommend that it be sown in drills, rather than broadcast, and cultivated, in all respects, in the same manner as our usual corn crops are treated. The butter-maker and the milk-seller who have relied on their scant pastures, will find their profits handsomely increased by feeding out this crop.

Hints to the Farmer.—Keep your enclosures in good repair. If a post or a stake rots supply its place with another before it fall and introduces your own or your neighbor's cattle into your corn or wheat field. Stone walls are the most valuable of all enclosures, where one has the materials for erecting them, or where they can be obtained within any reasonable distance, walls are cheaper than any other fence that can be constructed. A farm, surrounded with good walls, may be regarded as

enclosed for all time; the materials, although the walls may fall, or be thrown down, never decay. Next to walls, we may mention stump fence as the most valuable species of field enclosure. Properly constructed, on land that does not "heave," they endure for generations, and ordinarily subject the farmer to but little expense for repairs. Hedges of thorn are also valuable, and produce a most beautiful effect upon a landscape. They are also very durable and efficient.

EXTRACTS AND REPLIES.

CUTTING OFF CATTLE'S TAILS.

MR. EDITOR:—I wish to inquire through your paper whether it is necessary to cut off the end of neat cattle's tails every spring? Will you please to explain what the effect is upon them? I am young and inexperienced in such matters.

Keene, N. H. J. W. N.

No—the practice of cutting off the tails of neat cattle is not necessary; it is a barbarous relic of which this age ought to be ashamed. It is a cruel mutilation, causes a wasteful loss of blood which is again to be supplied by your grass, hay and grain, and deprives the animals of the means which nature provided to protect themselves from the insects which annoy them. Why did HE who formed them furnish a long tail, so admirably provided with a brush at its end, but for some good purpose? The advocates of this shameful practice may say that blood-letting is necessary—that the end of the tail becomes soft, and that unless it is cut off the animal will sicken and die. But such reasoning is nonsensical, and the effects of an old superstition; you might as well cut a man's leg off because the end of his great toe is soft by the irritation of his boot.

There is a mania among the hired men to cut off the cows' tails, and their arguments are wonderfully strengthened by the recollection, that if the tail is only a foot or two long, it will not be very likely to come into their faces while milking. The superstition has had its popularity altogether too long.

There is a sickness not uncommon among cattle soon after they are turned to grass, which is probably occasioned by a sudden change from dry to succulent food, and at the same time from a dry and warm temperature to cold winds, storms, and exposure to the night air. The hind limbs are affected, sometimes the joints swell, and there is a trembling and a giving way, so that the animal can scarcely drag itself along. In England, it was supposed that the origin of this difficulty was in the tail, and was called *tail-ill* or *tail-slip*, and has come to us under the expressive term, *tail-sick!* Mr. DICK, of Edinburgh, has taken up this subject in a very interesting point of view, in the *Quarterly Journal of Agriculture*. He says—

"The farmer and the cowleech believe that the mischief passes along the cow's tail to the back, and that it is on account of something wrong in the tail that she loses the use of her legs; and then some set to work and cut the cow's tail off; while others, less cruel, or more scientific, make an incision into the under surface, and allow the wound to bleed freely, and then fill it up with a mixture of tar and salt, and we know not what.

"In some parts of the country, the practitioner is not content with this treatment, but supposing there is witchcraft in the business, he has recourse to some charm in addition to the cutting and dressing. This charm consists in binding a small piece of the rowan tree on the extremity of the tail, and making a black cat pass three times round the cow's body, over her back, and under her belly, (which if it happens to be a strange cat, as is often the case from the necessity of the color, being black) so enrages the animal, that she mews and scratches with all the fury to which she is so easily excited, until she escapes from the hands of the necromancers, leaving them convinced that the devil has got into the cat.

"The disease, in ordinary cases, is said to consist in a softening of the bones about the extremity of the tail, and is to be distinguished by the point of the tail being easily doubled back upon itself, and having at this doubling a soft and rather a crepitating kind of feel. But what is the real state of the case? The tail is lengthened out to the extent of about three feet, and is formed like a common whip. Towards the extremity, the bones terminate gradually, becoming insensibly smaller as they proceed downwards. At this part is said to be found a soft space—the *tail-slip*. Beyond this again, a firm swelling cartilaginous portion is found, covered with hair to brush off the flies within its reach. Now why have we the long column of bones; the termination with a soft space of a few inches; this thickened, hard, cartilaginous part at the very extremity, and that extremity covered with hair, but with a view to form a whip to drive off, and with the greatest possible effect, the insects which wound and torment the animal?

"Here the column of bones forms the shaft or handle of the whip—the soft part, the connection between the handle and the thong, while the thickened extremity may be easily recognized to represent the thong, and the hairs to form the lash, or point; so that we have a whip to drive away the flies, and so complete a one, that the coachman may borrow a lesson from its construction.

"We trust, therefore, that our readers will never be found again looking at the tail of the cow for an explanation of palsy, or any other complaint; (for we believe this *tail-slip* is supposed to be connected with various other maladies;) but we will allow them to examine it once more, in order to admire its adaptation to the purpose for which it is requiried, and the peculiar contrivance of this supposed diseased part, for the more effectual accomplishment of this natural purpose."

We think the above will satisfy our inquiring friend that if the tail is really diseased, that the *origin* of the difficulty is not in the tail itself, but suffers with the other parts of the system. It is not improbable that relief may sometimes be afforded by this cropping, but there are remedies

better than to mutilate and disfigure the animal for life.

THE SEASON.

I have not done the first stroke of farming yet, and may not for a week to come. We are now having the first spring rain. The frost is mostly out, but the ground has not settled until this rain, which I hope will do the thing in good earnest. I have learned to look upon the *Farmer* as an old and well-tried friend, and to welcome its appearance, laden with stores of the good and the useful." S. TENNEY.

East Raymond, Me., May 9, 1854.

O. S. BLISS, *Milton, Vt.*—You must write Rev. J. T. TRASK, of Fitchburg, Mass., for information about the stump puller. Millet seed is worth two dollars a bushel. For particulars in relation to it as a crop for fodder, see monthly *Farmer*, for 1853, pages 157 and 203. On good land, well manured, eight quarts of seed is sufficient for an acre.

H. F. OSLAND, *Paxton, Mass.*—"Will you please inform me what kind of manure will be the best for potatoes on wet, clayey land, where barn-yard manure cannot be had?"

If you *must* plant such land with potatoes, and have no coarse manures, try guano on a portion of it—on another try ashes, sawdust, &c. But the best use for such land is to plow, manure and lay down to grass in August.

MR. GEORGE CARPENTER, *Orange, Mass.*, writes that he has a pair of twin lambs which at birth weighed 19¼ lbs., and another which weighed 11½ lbs., from two English "smut sheep." A neighbor, Mr. R. E. CARPENTER, has a calf which weighed at birth 140 pounds!

E. KINSLEY, *Derby, Vt.*, writes: "you will confer a favor by informing me what is the best and most profitable way of raising southern corn for fodder; also the best way of curing it for winter use, and where I can get good seed?"

Plow and manure your land well, and then make a broad, shallow furrow, by going both ways with a small plow, and then sow the corn liberally in the furrow. Five or six rows ten rods long each, we should think, would require half a bushel of seed. The common yellow or white flat southern corn, such as may be found at any of the grain stores, is the kind mostly used. It should be sowed quite thick or it will grow so stout that the cattle will refuse to eat it. It is a very difficult crop to dry sufficiently for winter use, but with favorable weather may be cured by allowing it to wilt for a day or two after cutting, then tie in small bundles near the top and hang upon the fences or poles laid up for the purpose.

SICK HOGS.—MESSRS. EDITORS:—I saw in a late *Cultivator*, an inquiry by Mr. Snow for a remedy for lame hogs, and would say to him, I had a breeding-sow last spring, which, when she had gone about one-quarter of her time, was taken very much as his were. I had seen bone-dust recommended in the *Cultivator* some time before, and therefore took beef-bones, burnt them and pounded them fine, and put two table-spoonfuls of the dust, one of flour of sulphur, and a little wood-ashes, in her feed, which completely cured my hog, which brought me as fine a litter of pigs as ever I raised, obtaining for them the first premium at the last agricultural Fair held at Providence, R. I. —*Boston Cultivator.* WARWICK.

For the New England Farmer.

RANCID BUTTER.

MR. EDITOR:—Dear Sir,—I have just been reading a long article in the *Farmer* of April 22, on *rancid butter*. I am not about to write an essay on butter-making, but I do wish to ask one plain question, and that is this. What possible difficulty is there in the way of (at least some) of you Boston folks having good butter? I do know that there is good butter made in the country, and you might just as well have it right from the dairy as to have it go through the hands of speculators, to be spoiled, and then pay them a heavy fee for their trouble of spoiling it. They come and tell us they can afford to pay us 14 or 15 or at the most 16 cents per lb., for our butter, if it is *very nice*, and after compounding it with equal parts of other grease, they go to your market and sell it for double what they gave, and the dairy-women are scandalised for making such miserable butter. Now I do not believe in this mode of doing business. If you have my butter, why not have it of *me?* not of the third or fourth person, which method takes all the profit from me, and gives it to him who don't deserve it; it also increases your butter bill, and that, too, for a poorer article than I would furnish.

We have some three or four hundred lbs. nice maple sugar we should like to sell—no dead negroes in it. MRS. S. PIERCE.

Londonderry, Vt., 1854.

REMARKS.—Though, perhaps, not intended for publication, we give the above excellent letter for the benefit of our butter-eating and maple sugar loving friends. We have not seen a pound of first-rate butter these three months; nor have we any doubt but that the good butter is mixed, as intimated above. There is no eatable so scarce in market, as that of good butter.

CORN AND THE WIRE-WORM.

MR. JOHN WORMLEY communicates the fact to the *Michigan Farmer*, that at the time of planting his corn, he put two or three pieces of corn cobs in the hill, and that in a few days if there are any wire-worms in the soil, they will be found in the pith of the cob, and will remain there without interfering with the corn. The editor of the *Farmer* suggests that at the first hoeing it would be well to take out the cobs and burn them, and thus destroy the worms. The remedy may be easily tried, and the cob would undoubtedly be worth something to the hill as a fertilizer.

For the New England Farmer.

MONTHLY FARMER FOR MAY,

This publication "has been laid upon our table," as the editors say; and for aught I can see, it looks just as well along-side that loaf of brown bread, as it would in the study of the literary man. It has been read, too; it never stays long in our house without that. Beside "ourselves," here are four boys large enough to read the pieces or to crow over the pictures, and when we add the neighbors who help us patronize the paper, we shall have probably about the right figure with which to multiply the whole number printed, in order to ascertain very nearly how many people read the *Farmer*, and to form some opinion of the influence, on young and old, which must be exerted by it as a whole, and by each article as a part. These facts ought to be kept in mind by all who write for the paper. Were the readers of the *Farmer* to be assembled in some vast grove, and we, the occasional contributors to its columns, severally called to the "stand" and obliged to read our respective productions, face to face with the congregated multitude, should we have no cause to regret that we took no more pains in the arrangement of our thoughts, in our mode of expression, or in the brevity of our articles? However this might be, I think the following Table of Contents of the May *Farmer* will show that most of us would have no occasion to be ashamed of the company in which we should find ourselves placed.

CORRESPONDENCE.

——, (Ms.).....Legislative Ag. Meetings.
B. F. Cutter, (N. H.).....Profit in Raising Corn.
A Vermonter, (Vt.).....Renovating Soils.
C. Goodrich, (Vt.).....Bugology *vs.* Squashology.
R. M. Copeland, (Ms.).....What a Garden Should be.
Prof. Harris, (Ms.).....Larvæ of the Crane Fly.
E. Marsh, (Vt.).....How to make the Butter Come.
D. C., (Mass.).....Farming in New England.
J. B. Farmer, (Ms.).....The Crow—Winter Worms.
Spartacus, (Ms.).....Witch Hazel.
S. W. Jennings, (Me.).....Save the Bones.
L. W. Curtis, (Ms.).....Guano and Super-phosphate.
O. V. Hills, (Ms.).....Horn Shavings.
Benj. Willard, (Ms.).....Early June Beet.
J. W. Proctor, (Ms.).....Butter Making.
A Subscriber, (Ms.).....Onions and Carrots.
David Lyman, (Ct.).....Mowing Ground.
W. D. B., (Ms.).....Barn Stables.
F. Holbrook, (Vt.).....Composting.
A Reader, (Ms.).....Farmer for March.
L. Durand, (Ct.).....Potato Rot.
J. J. H. Gregory, (Ms.).....Effects of Inoculation.
Asa Clement, (Ms.).....To Destroy the Curculio.
H. F. French, (N. H.).....Sewing Machine.
L. Mathews, (Vt.).....Warts on Plum Trees.
G. P., (Ms.).....Potash as a Fertilizer.
A City Mechanic, (Ms.).....City Life.
F. Holbrook, (Vt.).....Fattening Swine.
H. W. Merriam, (Ill.).....Illinois Farm Implements.
——, (Ms.).....Cattle of New England.
Ten or twelve others.....Make inquiries and suggestions.

EDITORIAL.

Calendar for May—Preparing Seed Corn—Concord Farmer's Club—Tenth, Eleventh and Twelfth Legislative Agricultural Meetings—Middlesex Co. Premiums—The Weather and Crops—Ketchum's Mowing Machine—State Farm at Westboro'—Use of Guano—Roots of Plants, Transplanting—Horse Hoe—Fruit Trees—Extracts and Replies—Improved Hinge Harrows.

EXTRACTS.

Extra Cow—Rancid Butter—Classification of Manures—Sowing Clover Seed—Plums, the Curculio—Past and Present Condition of Agriculture—Plowman's Song—Natural Beauty of Ornamental Trees—American Pomological Society—Will Ashes Dissolve Bones?

For want of time, it is impossible for me to attempt any sort of review of the contents of this number of the *Farmer*. Still, I am unwilling to let the occasion slip without expressing my hearty commendation of the action of the Concord Farmers' Club in respect to agricultural experiments. It strikes me that the club have set an example that other similar associations will do well to follow,—an example the club will yet be proud of. The results of the experiments which individual members of the Concord Club have pledged themselves to make, will be looked for with interest by the readers of the *Farmer*, where we hope to find their reports, in due season. A "Concord Club" in every county of the Union!

A READER.

Winchester, May, 1854.

CULTURE OF THE SWEET POTATO.

This delicious and wholesome vegetable may be raised without difficulty in the New England States. It will not be quite so highly flavored, or dark colored as the southern, but is well worthy a place in every kitchen garden. By placing a potato in a hot-bed, or even on the grass, covered with fine loam and horse manure, sprouts enough may be obtained to plant several hills; the shoot must be pinched out with the nail and transplanted in the same manner that cabbage plants are. The treatment afterwards may be the same as for the cabbage. The vines run upon the ground like the cucumber vine, and are very beautiful. Plant on sandy loam and the hottest place you have; the first week in June is early enough.

Slips ready for transplanting may be obtained of L. RAND & Co.—84 Quincy Market, Boston.

LAYING OUT SURFACES.

To lay out an acre in a circle.—First fix a centre, and with a rope as a radius seven rods, three links and three-eighths long, one end attached to the centre and kept uniformly stretched, the sweep of it at the other end will lay out the acre.

For one-quarter of an acre, a rope *three* rods and *fourteen* links will be the right length.

For one-eighth of an acre, a rope *two* rods and *thirteen* links will be enough.

Triangles.—If you wish a triangle to contain just an acre, make each side nineteen rods, five and a half links long.

A triangle whose sides are six rods and twenty links long each, will contain one-eighth of an acre.

To lay out an Ellipse or Oval.—Set three stakes in a triangular position. Around these stretch a rope. Take away the stake at the apex of the triangle, which will be where the side of the oval is to come—move the stake along the rope, keeping it tight, and it will trace out the oval.

A square, to contain an acre, or just one hundred and sixty rods, should have each of its sides just twelve rods, ten feet and seven-tenths long.

☞ The original color of black garments can be restored by saturating the rusty parts with an infusion of logwood applied with a sponge; "dry and press off with a hot iron."

STOVES.

The quantity of air that rushes up a stove-pipe in windy weather, is much greater than when it is comparatively calm, unless the room is uncommonly tight. On this account every stove-pipe ought to have a valve or damper to regulate that quantity. But there is another reason why there ought to be a valve: when the fire is newly kindled, much smoke has to pass off, and may need the whole capacity of the pipe; but when the wood is nearly reduced to coal it may be partially closed; and during the process of combustion, they who sit near the stove ought to be attentive, and regulate the draft accordingly. Since I wrote last, a valve of this description has been fixed in the pipe; and I am satisfied that in windy weather, one-half of the wood is saved. In calm weather, it is of less account, though still very useful. ☞ The fire now keeps as well through the night as on a hearth.

AN INVALID.

—*Country Gentleman.*

Ladies' Department.

WHY DON'T LADIES LEARN TO COOK.

Among the common things to the teaching of which public attention is now so strongly directed, it is to be hoped that the art of cookery—one of the commonest, and yet, apparently, one of the most neglected of all—will not be forgotten. The instruction of the female peasantry in this useful art would be as advantageous to themselves when married and settled on their own hearths, as to the families of the middle classes, in which before marriage they officiate as domestic servants. Emigration and abundance of employment have given to the servants at home the upperhand as completely as if they were in Australia. On all sides we hear complaints of the difficulty of finding, and of retaining when found, a cook who can roast a leg of mutton, and make batter pudding or pea-soup. In point of fact, we have heard of ladies who have it in serious contemplation to dispense with servants altogether, as the least troublesome alternative. Without wishing matters carried quite so far, we are convinced that many of our fair friends would lose nothing, either in point of respectability or happiness, while they could add at least one-third to the effective incomes of their husbands, if they were to spend a little more time in their kitchens superintending the preparation of the family dinner, instead of contenting themselves with ordering it—if, indeed, they condescended to do even that. Some forty years back ladies were driven to shoemaking as a fashionable way of killing time. Why not try a little cooking? Thanks to the modern stoves with their nicely arranged skillets and stewpans, which science and skill have substituted for the blazing kitchen hearth of other days, young ladies of the nineteenth century just passing its prime, may cook without soiling their fingers or injuring their complexions. Were it not so, we would not recommend them to cook. We would rather live on bread and cheese all our lives.

It will be said, perhaps, that our notions with regard to female education and employment are too antiquated—that in these matters, as in everything else, a new era has dawned, and the solid course of instruction now given in colleges for ladies will be triumphantly appealed to. Ladies, however, who possess these solid acquirements—who like Lady Jane Grey, prefer Plato to a picnic—will be least likely to neglect the economy of the kitchen. They will thoroughly understand the dignity of the employment, and call to mind all the poetry of cooking. To say nothing of the dinner which Milton describes Eve as preparing when "on hospitable thoughts intent," there are the Homeric banquets, at which kings literally "killed their own meat," and at which queens and princesses turned the spit for the roasting, or drew the water and chopped wood for the boiling. Cooking is classical, and no lady will disdain to take part in it who has read of these feasts in the original Greek. Let it be observed that it is the middle and working classes on whom we wish to urge the importance of the study. An earl's daughter can afford to be so ignorant of common things as not to be able to recognize chickens in a poultry-yard, because they do not run about with a liver under one wing and a gizzard under the other, though our modern poultry shows, it must be confessed, have done much to dissipate this error. A knowledge, however, of the art of cooking is of more importance to the wives of the laboring population than to those of the middle classes, because it is the art, when properly cultivated, of making a little go a great way. A French army can subsist in a country where an English one would starve, and chiefly for this reason—a French soldier can cook.—*Mark-Lane Express.*

ENGLISH RECEIPTS.

TEA CAKE.—Rub into a quart of dried flour of the finest kind, a quarter of a pound of butter; then beat up two eggs with two teaspoonfuls of sifted sugar, and two tablespoonfuls of washed brewer's or unwashed distiller's yeast; pour this liquid mixture into the centre of the flour, and add a pint of warm milk as you mix it; beat it up with the hand until it comes off without sticking; set it to rise before the fire, having covered it with a cloth; after it has remained there an hour, make it up into good-sized cakes an inch thick; set them in tin plates to rise before the fire during ten minutes, then bake them in a slow oven. These cakes may be split, toasted, and buttered after they are cold.

ICING FOR CAKE.—Beat the white of one egg perfectly light—then add eight teaspoonfuls of loaf sugar, pounded fine and sifted, very gradually, beating it well; after every spoonful, add one drop of the essence of lemon, or rose-water, to flavor it. If you wish to color it pink, stir in a few grains of cochineal powder or rose-pink; if you wish it blue, add a little of what is called powder-blue. Lay the frosting on the cake with a knife, soon after it is taken from the oven—smooth it over, and let it remain in a cool place till hard. To frost a common-sized loaf of cake, allow the white of one egg and half of another.

PLEASANT.—Going to "meet her by moonlight," and after waiting for two hours, to find yourself still "alone."

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A splendid lot of Sugar Maple, 8 to 10 feet high, $30 per hundred.

6000 Apple stocks, $10 per thousand.

5000 Buckthorn, 2 to 3 years, $15 to $20 per thousand.

Large and fine Norway Spruce; Arbor Vitæ for hedges and standards.

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Scions will be furnished, if ordered early.

Other things too numerous to mention. All orders will be promptly attended to, and the trees securely packed, when desired, for which an extra charge will be made. Catalogues sent to post-paid applicants. All packages delivered in Boston free of expense.

JAMES HYDE & SON.

Newton Centre, March 18, 1854. w*tf

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Newton Corner, March 18, 1854. w*tf

To Farmers.

THE subscriber is now prepared to receive orders for the Improved Poudrette. It has been manufactured under the advice of some of the best agricultural chemists in the Country, and is now commended to the public as the most certain and cheap Fertilizer that can be obtained, acting favorably on all crops, and on all soils. Six different articles are used in its composition, which combined make it a perfect manure for every crop raised in New England. It is finely adapted to corn, and the present and prospective high prices of this indispensable crop, ought to induce all farmers to increase the quantity planted, which they can do profitably by using the Improved Poudrette.

Prof. Mapes says of it, "no farmer using it once, will be willing ever to dispense with it." I raised corn with it the past season at a cost of less than 40 cts. ℔ bushel. Price in Providence $1,50 ℔ bbl., cash. It can be obtained of Messrs. PARKER & WHITE, 59 & 63 Blackstone Street, Boston.

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Feb. 25, 1854. 3mo*

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Agent for the manufacturer, 5 Commercial, corner of Chatham Street, Boston.

Feb. 18, 1854. tf*

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Full-blooded, of the Motley Stock,—dropped March 23, for sale by

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May 6, 1854. tf

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Feb. 25, 1854. 1w*June

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April 29, 1854. 6m℔

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Feb. 18, 1854. tf*

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March 18, 1854. tf

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April 15, 1854. 6w